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FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order, C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_3Br_3Se Methylselenium tribromide, 572.
CH_3O_3Se Methaneselenonic acid, potassium salt, 572.

C_2 Group.

C_2HOCl_3 Chloral, reaction of, with phenols, 718.
$C_2HO_2Cl_3$ Trichloroacetic acid, mercurous and quinol salts, electric polarisation of, 565.
$C_2H_5O_2N$ Glycine, carbonisation of, 255.
$C_2H_6O_3Se$ Ethaneseloninic acid, potassium salt, 573.
$C_2H_6O_4S$ Isethionic acid, and its salts, 716.

C_3 Group.

C_3H_3NS Thiazole, hydrochloride of, 385.
C_3H_7ON *iso*Oxazolidine, and its salts, 433.
$C_3H_8O_3Se$ Propane-1-selenonic acid, potassium salt, 573.
C_3H_8NI Trimethyleneimine hydriodide, 174.

3 IV

$C_3H_8Cl_2HgSe$ Methyl ethyl selenide mercurichloride, 573.

C_4 Group.

C_4H_6 Butadiene, bimolecular dimerisation of, 612.

4 III

C_4H_5ON α-Methoxyacrylonitrile, 522.
C_4H_5NS Methylthiazoles, 385.
$C_4H_7O_2N$ α-Methoxyacrylamide, 522.
$C_4H_8OCl_2$ αγ-Dichloro-β-methyl*iso*propyl alcohol, 171.
C_4H_9ON Tetrahydro-1:2-*iso*oxazine, and its salts, 432.
$C_4H_9O_2N$ β-Hydroxy-α-methoxypropionamide, 521.

4 IV

C_4H_6ONBr β-Bromo-α-methoxypropionitrile, 522.
$C_4H_7O_2NBr_2$ αβ-Dibromo-α-methoxypropionamide, 522.
$C_4H_8O_2NCl$ Chloromethoxypropionamides, 521.
$C_4H_8O_2NBr$ Bromomethoxypropionamides, 522.
$C_4H_{10}Cl_2HgSe$ Methyl *n*-propyl selenide mercurichloride, 574.

C_5 Group.

C_5H_6 *cyclo*Pentadiene, catalytic syntheses with, 618.

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$C_5H_{10}O_2$ Tetrahydrofurfuryl alcohols, rotatory dispersion of, 531.
$C_5H_{11}F$ *tert.*-Amyl fluoride, 499.
$C_5H_{14}N_2$ αγ-Bismethylaminopropane, and its salts, 168.
$C_5H_{16}N_4$ Tetrakisaminomethylmethane, 167.

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$C_5H_4O_2N_4$ Xanthine, synthesis of, 232.
$C_5H_5O_4N_3$ 5-Nitro-1-methylglyoxaline-4-carboxylic acid, 235.
$C_5H_6O_3N_4$ 5-Nitro-1-methylglyoxaline-4-carboxyamide, 236.
4(5)-Ureidoglyoxaline-5(4)-carboxylic acid, 234.
C_5H_7NS 2:4-Dimethylthiazole, and its hydrochloride, 386.
$C_5H_9O_2Br$ Methyl β-bromo*iso*butyrate, 425.

$C_5H_9O_3Cl$ Methyl α-chloro-β-methoxypropionate, 521.
$C_5H_9O_3Br$ Methyl β-bromo-α-methoxypropionate, 522.
$C_5H_{11}O_2N$ Betaine, reactions of, with aromatic amines, organic sulphides, and sodium sulphite, 48.
$C_5H_{11}O_2N$ αβ-Dimethoxypropionamide, 521.
Methyl α-methoxyacrylamide, 522.
$C_5H_{12}O_2S$ Methyl-*n*-butylsulphone, 54.
$C_5H_{12}NI$ *N*-Methyltrimethyleneimine methiodide, 174.

5 IV

$C_5H_{12}ONI$ *N*-Methyl*iso*oxazolidine methiodide, 433.

C_6 Group.

C_6H_8O Propenylethinylcarbinol, 734.
$C_6H_6O_4$ *trans-trans*-Methyl fumarate, crystal structure of, 417.
$C_6H_8N_2$ *o*-Phenylenediamine, condensation of, with ethyl acetoacetate, 303.
Phenylhydrazine, oxidation of, by cupric salts, 528.
$C_6H_{10}O_2$ *cyclo*Hexene hydroperoxide, 132.
$C_6H_{10}O_3$ Ethyl acetoacetate, condensation of, with *o*-phenylenediamine, 303.
$C_6H_{10}O_4$ Ethyl succinate, condensation of, with aromatic ketones, 585.
$C_6H_{11}Cl$ *dl*-γ-Methyl-α-ethylallyl chloride, 25.
$C_6H_{12}O$ γ-Methyl-α-ethylallyl alcohols, reactions of, 18.
$C_6H_{12}O_4$ Methyl αβ-dimethoxypropionate, 521.
$C_6H_{15}N_3$ *NN'N''*-Trimethyltrimethylenetriamine, action of benzene- and toluene-sulphonyl chlorides on, 30.
$C_6O_2Br_4$ 2:3:5:6-Tetrabromobenzoquinone, preparation of, 583.

6 III

$C_6HO_2D_5$ Pentadeuteropyrocatechol, 396.
$C_6H_3O_2I$ 2-Iodobenzoquinone, preparation of, 375.
$C_6H_7O_4N_3$ Methyl 4-nitro-1-methylglyoxaline-5-carboxylate, 235.
$C_6H_8O_3N_4$ Methyl 4(5)-ureidoglyoxaline-5(4)-carboxylate, 234.
$C_6H_9N_4S$ 2-(5-Aminopyridyl)*iso*thiourea, dihydrochloride of, 584.
$C_6H_{10}O_2Br_2$ βε-Dibromo-*n*-hexoic acid, 424.
$C_6H_{11}O_3N$ Carbethoxy*iso*oxazolidine, 433.
$C_6H_{13}O_2N$ β-Carbethoxy-*n*-propylamine, and its picrate, 425.
$C_6H_{14}O_2S$ Methyl-*n*-amylsulphone, 54.
$C_6H_{14}Br_2Se$ Di-*n*-propyl selenide dibromide, 572.

6 IV

$C_6H_6O_2N_2S$ *p*-Nitrobenzenesulphenamide, 244.
$C_6H_7ON_2Cl$ 3-Chloro-2:4-diaminophenol, 435.
$C_6H_8O_3N_2S$ 5-Amino-2-hydroxybenzenesulphonamide, 709.
$C_6H_8O_2N_2S$ *p*-Aminobenzenesulphonhydrazide, 740.
$C_6H_{11}O_6N_3S$ 4(5)-Nitro-5(4)-methylglyoxaline methosulphate, 235.
$C_7H_{13}O_3BrSe$ Dimethylselenetine bromide, 572.
$C_6H_{14}ONI$ *N*-Methyltetrahydro*iso*oxazine, 433.
$C_6H_{14}Cl_2HgSe$ Di-*n*-propyl selenide mercurichloride, 574.

6 V

$C_6H_7O_5N_2SNa$ Sodium 2-aminopyridine-*N*-methylenebisulphite, 244.

C_7 Group.

C_7H_8O *p*-Cresol, reaction of, with chloral and its hydrate, 718.
$C_7H_8O_2$ Acetylvinylethinylcarbinol, 735.
$C_7H_{10}O$ *iso*Butenylethinylcarbinol, 735.
4-Methylhex-4-en-1-yn-3-ol, 735.
$C_7H_{12}O$ 2:4-Dimethylpent-2-enal, 732.
1-Methyl*cyclo*hexenol, 136.
$C_7H_{12}O_2$ 1-Methyl*cyclo*hexene hydroperoxide, 136.
$C_7H_{14}O$ Methyl γ-methyl-α-ethylallyl ether, 26.
$C_7H_{14}O_3$ 1-Methyl*cyclo*hexane-1:2:3-triol, 136.

7 III

$C_7H_6O_2S$ *p*-Thiolbenzoic acid, preparation and properties of, 376.
$C_7H_8O_2S$ *p*-Toluenesulphinic acid, copper and nickel salts, 264.
$C_7H_8O_3S$ *p*-Toluenesulphonic acid, copper and nickel salts, 264.
$C_7H_{11}ON$ 2-Ketopyrrolizidine, and its picrolonate, 426.
$C_7H_{11}O_4Br$ ε-Bromopentane-αβ-dicarboxylic acid, 423.
$C_7H_{13}O_2N$ *N*-Carbethoxytetrahydro*iso*oxazine, 433.
$C_7H_{16}ON_2$ αγ-Bisdimethylamino*iso*propyl alcohol, 172.

7 IV

$C_7H_7O_4NS$ Methyl *p*-nitrobenzenesulphinate, 244.

C_8 Group.

C_8H_{10} Xylene, autoxidation of alkyl groups in, 185.

8 II

$C_8H_8O_5$ 3:5-Dihydroxy-2-formylbenzoic acid, 369.
$C_8H_8O_4$ 4:6-Dimethoxytoluquinone, preparation of, 583.
$C_8H_9N_3$ 4:6-Dimethylbenztriazole, 422.
$C_8H_{10}O_2$ Acetylpropenylethinylcarbinol, 734.
$C_8H_{10}O_4$ *trans-trans*-Methyl muconate, crystal structure of, 417.
$C_8H_{11}N$ Dimethylaniline, reaction of, with nitric acid, 584.
$C_8H_{11}N_3$ 4-Aminophenylacetamidine, dihydrochloride of, 110.
$C_8H_{12}O$ Acetyl*cyclo*hexene, self-condensation of, 393.
$C_8H_{12}N_2$ 3-Ethylaminomethylpyridine, and its salts, 432.
$C_8H_{13}N$ Dehydro-2-hydroxy-2-methylpyrrolizidine, and its picrolonate, 426.
$C_8H_{14}O$ 1:2-Dimethyl*cyclo*hexen-3-ol, 137.
$C_8H_{14}O_2$ 1:2-Dimethyl*cyclo*hexane 3-hydroperoxide, 137.
dl-γ-Methyl-α-ethylallyl acetate, 25.
$C_8H_{14}O_6$ 2:5-Dimethyl 3:6-anhydro-*l*-galactonic acid, 753.
$C_8H_{15}N$ 2-Methylpyrrolizidine, and its picrate, 424.
$C_8H_{16}O_3$ 1:2-Dimethyl*cyclo*hexane-1:2:3-triol, 137.
$C_8H_{19}N$ Ethylhexylamine, and its hydrochloride, 403.
$C_8H_{20}N_2$ αγ-Bisdimethylamino-β-methylpropane, and its salts, 171.

8 III

C_8H_7ON 4-Cyanobenzyl alcohol, 114.
$C_8H_7O_2Cl_3$ Phenyl ββ*β*-trichloro-α-hydroxyethyl ether, 719.
$C_8H_9O_2N$ 4-Carbamidobenzyl alcohol, 114.
$C_8H_{10}ON_2$ Nicotinethylamide, 432.
$C_8H_{10}NBr$ 4-Amino-β-phenylethyl bromide, and its hydrochloride, 115.
$C_8H_{10}N_2Cl_2$ 2:6-Dichloro-4-aminodimethylaniline, 757.
$C_8H_{11}O_3N$ Ethyl 3-hydroxy-4-methylpyrrole-2-acetate, 426.
$C_8H_{11}N_2Cl$ 2-Chloro-4-aminodimethylaniline, and its stannichloride, 756.
$C_8H_{15}ON$ 2-Hydroxy-2-methylpyrrolizidine, and its picrolonate, 426.
$C_8H_{15}ON_3$ 2:4-Dimethylpent-2-enal semicarbazone, 732.
$C_8H_{15}O_2N$ Ethyl pyrrolidine-2-acetate, and its picrolonate, 426.
$C_8H_{15}O_3N_3$ 4-Hydroxy-4-methylhex-2-enal semicarbazone, 737.
$C_8H_{15}O_5N$ 2:5-Dimethyl 3:6-anhydro-*l*-galactonamide, 231.
$C_8H_{19}N_2Cl$ β-Chloro-αγ-bisdimethylamino-β-methylpropane, and its salts, 172.
$C_8H_{20}ON_2$ αγ-Bisdimethylamino-β-methyl*iso*propyl alcohol, and its salts, 171.

8 IV

C_8H_4ONCl 4-Cyanobenzoyl chloride, 115.
$C_8H_5O_5N_2Br$ 4-Bromo-3:5-dinitroacetophenone, 501.
$C_8H_8O_2N_2S$ Thioacetnitroanilides, 641.
$C_8H_9O_4NS$ Ethyl *p*-nitrobenzenesulphinate, 244.
$C_8H_{10}O_4N_2S$ 5-Acetamido-2-hydroxybenzenesulphonamide, 709.
$C_8H_{11}ONS$ 1-Methoxybenzthiazole, isomerisation of, 307.

C_9 Group.

$C_9H_8O_5$ Methyl 3:5-dihydroxy-2-formylbenzoate, 369.
$C_9H_{10}Br_2$ *o*-β-Bromoethylbenzyl bromide, preparation of, and its use in syntheses, 737.
$C_9H_{12}O_4$ 1:1-Dimethyl-Δ^2-*cyclo*pentene-3:5-dicarboxylic acid, 208.
$C_9H_{12}N_4$ 4-Amidinomethylbenzamidine, dihydrochloride of, 110.
$C_9H_{14}O_6$ β-Methylpentane-βδε-tricarboxylic acid, 208.
$C_9H_{16}O_2$ 2-Ethoxy-5-methyl-5-ethyl-Δ^2-dihydrofuran, 737.
$C_9H_{21}N$ *n*-Propylhexylamine, and its hydrochloride, 403.
$C_9H_{24}N_4$ Tetrakismethylaminomethylmethane, and its salts, 167.

9 III

$C_9H_4O_4Br_2$ 3:5-Dibromo-6-methoxyphthalic anhydride, 239.
$C_9H_5O_4Br$ 5-Bromo-6-methoxyphthalic anhydride, 238.
C_9H_8NBr 4-Cyano-β-phenylethyl bromide, 115.
$C_9H_9O_2Cl_3$ *p*-Tolyl ββ*β*-trichloro-α-hydroxyethyl ether, 719.
$C_9H_{10}O_4N_2$ *p*-Nitrophenylurethane, 152.
$C_9H_{11}OBr$ *o*-Bromobenzyl ethyl ether, 739.
$C_9H_{11}O_2N_3$ *N*-Nitroso-4-acetamidomethylaniline, 756.
$C_9H_{11}NS$ Thioacet-*m*-toluidide, 641.
$C_9H_{14}O_2N_2$ Nitrophenyltrimethylammonium hydroxide, salts, 271.
$C_9H_{17}O_2N$ Ethyl 1-methylpyrrolidine-2-acetate, synthesis of, 422.
$C_9H_{19}ON$ 2:2-Dimethylheptamide, 496.

9 IV

$C_9H_4O_8N_4S$ Picrylthiazole, 385.
C_9H_6ONBr β-4-Cyanophenoxyethyl bromide, 114.

$C_9H_9O_4NS$ α-(*p*-Nitrobenzylthio)acetic acid, 92.
$C_9H_9O_4N_4Cl$ 2-Chloro-6-nitro-*N*-nitroso-4-acetamidomethylaniline, 757.
$C_9H_9O_5N_4Cl$ 2-Chloro-6-*N*-dinitro-4-acetamidomethylaniline, 757.
$C_9H_{10}O_3N_3Cl$ 2-Chloro-6-nitro-4-acetamidomethylaniline, 757.
$C_9H_{11}O_2NS$ α-(*p*-Aminobenzylthio)acetic acid, 92.
$C_9H_{24}ON_2I_2$ αγ-Bisdimethylamino*iso*propyl dimethiodide, 172.

C_{10} Group.

$C_{10}H_{18}$ Dihydromyrene, preparation and oxidation of, 145.

10 II

$C_{10}H_{11}N$ 3:7-Dimethylindole, 682.
$C_{10}H_{12}O_4$ 3:5-Dimethyl-4:6-dimethoxytoluquinone, 578.
$C_{10}H_{12}O_4$ 3-Ethyl-4:6-dimethoxytoluquinone, 578.
$C_{10}H_{14}O_2$ Decalin-1:5-dione, 692.
2:2′-Diketodi*cyclo*pentyl, 691.
$C_{10}H_{14}N_2$ Nicotine, azeotrope of, with water, 511.
$C_{10}H_{16}O_2$ 1:3:3-Trimethyl-Δ^1-*cyclo*hexene-4-carboxylic acid, 206.
$C_{10}H_{18}O$ Bis-αγ-dimethylallyl ether, 559.
Hydroxydihydromyrcene, 148.
$C_{10}H_{18}O_2$ Decalin-1:5-diol, 692.
Dihydroxydihydromyrcene, 148.
$C_{10}H_{23}N$ *n*-Butylhexylamine, and its hydrochloride, 402.
Methylnonylamine, and its hydrochloride, 403.

10 III

$C_{10}H_5N_2Cl$ 6-Chlorocinchoninonitrile, 429.
$C_{10}H_6O_2Br_2$ Dibromo-1:5-dihydroxynaphthalenes, 237.
$C_{10}H_7O_2N$ 2-Nitronaphthalene, preparation of, 744.
$C_{10}H_8O_3S$ α- and β-Naphthalenesulphinic acids, copper and nickel salts, 265.
$C_{10}H_8O_3N_2$ 7-Amino-2-hydroxyquinoline-4-carboxylic acid, 216.
$C_{10}H_9OCl$ α-Phenylcrotonyl chloride, 222.
$C_{10}H_9O_6N_3$ 3:5-Dinitrobenz*iso*oxazolidide, 433.
$C_{10}H_9N_2Cl$ 6-Chloro-4-aminomethylquinoline, and its dihydrochloride, 429.
$C_{10}H_{10}ON_2$ 5-Amino-4-hydroxy-2-methylquinoline, 215.
Benziminazole-2-acetone, 304.
$C_{10}H_{10}OBr_2$ α-Bromo-α-phenylbutyryl bromide, 222.
$C_{10}H_{10}O_3Cl_2$ 2:4-Dichloro-3:5-dimethylphenoxyacetic acid, 678.
$C_{10}H_{10}O_4N_2$ Acetoacet-*o*-nitroanilide, 304.
$C_{10}H_{11}O_2Br$ α-(Bromophenyl)butyric acid, 223.
$C_{10}H_{12}O_5S$ *O*-Phenylacetylisethionic acid, sodium salt, 717.
$C_{10}H_{13}O_2N$ *p*-Tolylurethane, 152.
$C_{10}H_{13}O_3N_3$ 4-Nitro-2-acetamidodimethylaniline, 756.
$C_{10}H_{13}NS$ Thioacetethylanilide, 641.
Thiopropion-*p*-toluidide, 641.
$C_{10}H_{16}O_2N_2$ 4-Nitro-*o*-tolyltrimethylammonium hydroxide, salts, 272.
$C_{10}H_{16}O_4N_2$ 4-Nitro-2-methoxyphenyltrimethylammonium hydroxide, salts, 271.
$C_{10}H_{19}O_4N$ Carbethoxymethyl-β-carbethoxy-*n*-propylamine, and its picrolonate, 426.
$C_{10}H_{22}NCl$ Diethylamino-ω-chlorohexane, 428.
$C_{10}H_{23}ON$ 6-Diethylaminohexanol, 428.
$C_{10}H_{24}ON_2$ αγ-Bisdimethylamino-β-ethoxy-β-methylpropane, 172.
$C_{10}H_{24}N_2I_2$ αγ-Bistrimethylammonium-β-methylpropenylene di-iodide, 172.

10 IV

$C_{10}H_5O_2NCl_2$ 2:4-Dichloro-5-nitronaphthalene, 724.
$C_{10}H_5O_2NI_2$ 1:2-Di-iodo-5-nitronaphthalene, 724.
$C_{10}H_6O_2NCl$ 6-Chlorocinchoninic acid, 428.
2-Chloro-5-nitronaphthalene, 724.
$C_{10}H_6O_2NBr$ 2-Bromo-5-nitronaphthalene, 724.
$C_{10}H_6O_2N_2Cl_2$ 2:4-Dichloro-5-nitro-1-naphthylamine, 724.
$C_{10}H_6O_2N_2Br_2$ 2:4-Dibromo-5-nitro-1-naphthylamine, 724.
$C_{10}H_6O_4N_4S$ Picryl-2- and -5-methylthiazoles, 385.
$C_{10}H_7O_2ClS$ Chloromethylthio-oxindole-3-aldehydes, 414.
$C_{10}H_7O_2N_2Br$ 2-Bromo-5-nitro-1-naphthylamine, 724.
$C_{10}H_7O_2N_2I$ 2-Iodo-5-nitro-1-naphthylamine, 724.
$C_{10}H_8O_4N_2S$ 2:2′-Dipyridylsulphone, 243.
$C_{10}H_9ONS$ 1-Methyl-2-methylenebenzthiazoline-ω-aldehyde, 712.
$C_{10}H_{10}N_2Br_2S$ 2:2′-Dipyridyl sulphide dihydrobromide, 243.
$C_{10}H_{11}O_2NS$ Methyl thioacetanthranilate, 641.
$C_{10}H_{11}O_4NS$ β-(*p*-Nitrobenzylthio)propionic acid, 92.
$C_{10}H_{12}ON_2Cl_2$ 2:6-Dichloro-4-acetamidodimethylaniline, 757.
$C_{10}H_{12}O_3N_2Cl$ 2-Chloro-6-nitro-4-acetamidodimethylaniline, 757.
$C_{10}H_{13}ON_2Cl$ 2-Chloro-4-acetamidodimethylaniline, 756.
$C_{10}H_{13}N_2IS$ 3-Amino-2:4-benzthiazine ethiodide, 101.
$C_{10}H_{14}ON_2Cl$ 2-Chloro-6-amino-4-acetamidodimethylaniline, 757.
$C_{10}H_{14}O_7N_5P$ Yeast adenylic acid, synthesis of, 231.

10 V

$C_{10}H_7O_6N_4ClS$ *N*-Picryl-2-methylthiazolium chloride, 385.
$C_{10}H_{10}O_5NClS$ Acetamidoacetoxybenzenesulphonyl chlorides, 709.

C_{11} Group.

$C_{11}H_8O_2$ α- and β-Naphthoic acids, copper and nickel salts, 263.
$C_{11}H_{10}O$ Styrylethinylcarbinol, 735.
$C_{11}H_{10}O_2$ Acetylphenylethinylcarbinol, 734.
$C_{11}H_{10}N_2$ 4-Anilinopyridine, 726.
$C_{11}H_{12}O$ 1-Methyl-β-tetralone, 690.
$C_{11}H_{12}O_2$ 5-Methoxy-β-tetralone, 690.
$C_{11}N_{12}O_4$ 3-Propenyl-4:6-dimethoxytoluquinone, 578.
$C_{11}H_{13}N_3$ *N*-Methyl-lepidylamine, and its dihydrochloride, 431.
$C_{11}H_{13}N$ 3-Propylindoles, 681.
$C_{11}H_{14}O$ Phenyl αγ-dimethylallyl ether, 558.
$C_{11}H_{14}O_2$ *p*-*n*-Butylbenzoic acid, 308.
$C_{11}H_{14}O_4$ 3-*n*-Propyl-4:6-dimethoxytoluquinone, 578.
$C_{11}H_{16}O_2$ *o*-β-Hydroxyethylbenzyl ethyl ether, 739.
$C_{11}H_{16}O$ Dihydrojasmone, spectrum of, 486.
$C_{11}H_{18}O_2$ Tetrahydropyrethrolone, spectrum of, 486.
$C_{11}H_{25}N$ *n*-Amylhexylamine, and its hydrochloride, 403.
Dimethylnonylamine, 403.
Ethylnonylamine, and its hydrochloride, 403.

11 III

$C_{11}H_6O_3Br_2$ Dibromo-5-methoxy-1:4-naphthaquinones, 238.
$C_{11}H_7O_3Br$ 2-Bromo-5-methoxy-1:4-naphthaquinone, 238.
$C_{11}H_7NS$ α-Naphthylthiocarbamide, addition of chlorine to, 374.
$C_{11}H_8O_2Br_2$ Dibromo-5-methoxy-1-naphthols, 237.
$C_{11}H_9O_2Br$ 2-Bromo-5-methoxy-1-naphthol, 238.
$C_{11}H_{10}ON_2$ Cinchoninomethylamide, 431.
$C_{11}H_{10}O_2S$ 6-Ethoxythio-oxindole-3-aldehyde, 414.
$C_{11}H_{11}O_3Cl_3$ 3-βββ-Trichloro-α-acetoxyethyl-*p*-cresol, 719.
$C_{11}H_{11}O_4N_3$ 2-Pyrrolidone-5-carboxy-*p*-nitroanilide, 243.
$C_{11}H_{11}O_5Cl$ 6-Chloromethyl-4-hydroxy-3:5-dimethoxyphthalide, 727.
$C_{11}H_{11}O_6N_3$ *N*-3:5-Dinitrobenzoyltetrahydro*iso*oxazine, 433.
$C_{11}H_{12}ON_2$ 2-Amino-6-methoxylepidine, 383.
4-Amino-6- and -8-methoxyquinaldines, 382.
$C_{11}H_{12}O_2N_2$ α-Phenylcrotonylcarbamide, 222.
$C_{11}H_{14}O_5S$ *O*-β-Phenylpropionylisethionic acid, sodium salt, 717.
$C_{11}H_{14}O_9N_4$ *N*-Methyl*iso*oxazolidine methopicrate, 433.
$C_{11}H_{15}O_2N$ *cyclo*Hexane-1:1-diacetomethylimide, 495.
$C_{11}H_{15}O_2N_3$ γ-Phenoxybutaldehyde semicarbazone, 424.
$C_{11}H_{17}N_3S$ Eucarvone thiosemicarbazone, 486.
$C_{11}H_{26}N_2I$ ββ-Bisdimethylaminomethyl-*N*-methyltrimethyleneimine methiodide, 178.

11 IV

$C_{11}H_5NCl_2S$ 2:4′-Dichloronaphtha(1′:2′:4:5)thiazole, 375.
$C_{11}H_6O_2NCl$ 6-Chloroquinoline-2:4-dicarboxylic acid, 428.
$C_{11}H_6NClS$ 4-Chloro-α-naphthylthiocarbimide, 374.
$C_{11}H_8O_2NCl$ Methyl 6-chlorocinchoninate, 429.
$C_{11}H_{10}O_6N_3Cl$ *N*-(2:4-Dinitrophenyl)-1:4-dimethylglyoxalinium chloride, 386.
$C_{11}H_{11}O_4N_2Cl$ *N*-(Dinitrophenyl)-1:4-dimethylglyoxalinium chlorides, 386.
$C_{11}H_{13}O_2NS$ Ethyl *p*-thioacetamidobenzoate, 641.
$C_{11}H_{13}O_3N_2Br$ α-(Bromophenyl)butyrylcarbamide, 223.
$C_{11}H_{13}O_3N_2S$ 1-Phenyl-2:3-dimethyl-5-pyrazolone-*x*-sulphonamide, and its sodium salt, 243.
$C_{11}H_{14}O_6N_2S$ Sulphanilylglutamic acid, and its sodium salt, 242.

C_{12} Group.

$C_{12}H_{10}O_3$ 2-Keto-5-styryl-2:3-dihydrofuran, 34.
$C_{12}H_{14}O_3$ 2-Keto-5-β-phenylethyltetrahydrofuran, 34.
$C_{12}H_{14}O_3$ ε-Phenoxy-Δ^{α}-hexenoic acid, 424.
$C_{12}H_{15}N$ 3-*n*-Butylindole, 682.
$C_{12}H_{16}O_2$ *p*-*n*-Amylbenzoic acid, 308.
$C_{12}H_{16}O_4$ 3-*iso*Butyl-4:6-dimethoxytoluquinone, 578.
$C_{12}H_{18}O$ 1-Ethinylgeraniol, 733.
$C_{12}H_{18}O_8$ *n*-Octane-αδεθ-tetracarboxylic acid, 518.
$C_{12}H_{18}Br_4$ $\Delta^{2'}$-*cyclo*Hexenyl-Δ^{2}-*cyclo*hexene tetrabromide, 518.
$C_{12}H_{22}O_4$ β-Methyl-β-*n*-hexylglutaric acid, 494.
$C_{12}H_{24}O_7$ Pentamethyl methyl-*d*-galactonate, 753.
$C_{12}H_{27}N$ Propylnonylamine, and its hydrochloride, 403.

12 III

$C_{12}H_7O_5N_3$ 1-Nitrophenazine, 502.
$C_{12}H_7O_2Br$ 2-Bromo-5-acetoxy-1:4-naphthaquinone, 238.
$C_{12}H_8O_2Br_2$ 2:4-Dibromo-5-acetoxy-1-naphthol, 237.
$C_{12}H_9O_4N_3$ 4(5)-Nitro-5(4)-3′:4′-methylenedioxystyrylglyoxaline, 233.
$C_{12}H_{10}O_2N_2$ 2-Anilinonicotinic acid, 726.
N-(Pyridyl)anthranilic acids, 726.
$C_{12}H_{10}O_2Br_2$ Dibromo-1:5-dimethoxynaphthalenes, 237.
$C_{12}H_{11}O_2N$ Vinylethinylcarbinol phenylurethane, 735.
$C_{12}H_{11}O_2N_3$ Nitrostyryl-1-methylglyoxalines, 235.
$C_{12}H_{12}O_2N_2$ 5-Acetamido-4-hydroxy-2-methylquinoline, 215.
$C_{12}H_{12}O_3N_2$ Ethyl 7-amino-2-hydroxyquinoline-4-carboxylate, 216.
$C_{12}H_{13}O_5Cl$ 6-Chloromethyl-3:4:5-trimethoxyphthalide, 726.
$C_{12}H_{14}ON_2$ 2-Amino-6-ethoxylepidine, 383.
$C_{12}H_{14}O_2N_2$ 2-Pyrrolidone-5-carboxy-*m*-toluidide, 243.
$C_{12}H_{14}O_7S$ *O*-Acetylmandelylisethionic acid, sodium salt, 718.
$C_{12}H_{15}ON_3$ 1-Methyl-β-tetralone semicarbazone, 690.
$C_{12}H_{16}O_4N_4$ *N*-Methyltetrahydro*iso*oxazine methopicrate, 433.
$C_{12}H_{16}O_8N_4$ Acetonyltrimethylammonium picrate, 174.
$C_{12}H_{17}ON$ *p*-*n*-Butylphenyl methyl ketoxime, 308.
$C_{12}H_{20}O_5N_2$ 6:6-Diethoxyhex-4-yn-3-ol urethane, 736.
$C_{12}H_{21}O_4N$ Ethyl pyrrolidine-1:2-diacetate, 426.
$C_{12}H_{23}O_6N$ 2-Acetamido-3:4:6-trimethyl β-methylglucoside, 553.
$C_{12}H_{28}NI$ Dimethylnonylamine methiodide, 403.
$C_{12}H_{29}N_3I_2$ ββ-Bisdimethylaminomethyl-*N*-methyltrimethyleneimine dimethiodide, 178.

12 IV

$C_{12}H_6O_3N_2Cl_2$ 2:4-Dichloro-5-nitroaceto-1-naphthalide, 724.
$C_{12}H_6O_3N_2Br_2$ 2:4-Dibromo-5-nitroaceto-1-naphthalide, 724.
$C_{12}H_9ON_2Br$ 3-Bromo-4-benzeneazophenol, 435.
$C_{12}H_9ON_2I$ 3-Iodo-4-benzeneazophenol, 435.
$C_{12}H_9O_2N_2Cl$ 2-Chloro-2′-nitrodiphenylamine, 505.
$C_{12}H_9O_2ClS$ 2-Chloro-1-naphthylthioglycollic acid, 415.
$C_{12}H_9O_3N_2Br$ 2-Bromo-5-nitroaceto-1-naphthalide, 724.
$C_{12}H_9O_3N_2I$ 2-Iodo-5-nitroaceto-1-naphthalide, 724.
$C_{12}H_9O_6N_3S$ 4-Nitrobenzenesulphon-4′-nitroanilide, 244.
$C_{12}H_{10}O_4N_2Hg$ 5-Nitro-1-naphthylamine-2-mercuriacetate, 724.
$C_{12}H_{10}O_3N_2S$ 4-*p*-Nitrophenoxybenzenesulphonamide, 242.
$C_{12}H_{10}Cl_2AlAs$ Trichlorodiphenylchloroarsinealuminium, 669.
$C_{12}H_{11}O_7N_3S_2$ *p*-Nitrophenoxybenzenedisulphonamide, 242.
$C_{12}H_{12}O_3N_2S$ Aminohydroxybenzenesulphonanilides, 709.
$C_{12}H_{14}O_4N_2S_2$ *s*-Di-*p*-aminobenzenesulphonhydrazide, 740.
$C_{12}H_{15}O_2N_2S$ 1-*p*-Aminobenzenesulphonamido-2:5-dimethylpyrrole, 726.
$C_{12}H_{15}O_4N_2S$ 2-Pyrrolidone-5-carboxyamino-3′-methylbenzene-*x*-sulphonamide, 243.
$C_{12}H_{16}O_3N_2S$ Sulphanilyladipamide, 241.
$C_{12}H_{30}ON_2I_2$ αγ-Bisdimethylamino-β-ethoxy-β-methylpropane dimethiodide, 172.

12 V

$C_{12}H_{10}O_6N_2I_2S_2$ 5:5-Di-iodobenzidine-2:2′-disulphonic acid, sodium salt, 716.

C_{13} Group.

$C_{13}H_6N_2$ 3-Cyanocarbazole, 502.
$C_{13}H_{10}O_3$ Phenyl carbonate, parachor and structure of, 661.
$C_{13}H_{10}O_4$ 4-(4′-Hydroxyphenoxy)benzoic acid, 349.
$C_{13}H_{10}O_5$ 3-Hydroxy-4-(4′-hydroxyphenoxy)benzoic acid, 350.
$C_{13}H_{10}F_2$ *pp*′-Difluorodiphenylmethane, 568.
$C_{13}H_{14}O_2$ 2:5-Dimethoxy-1-methylnaphthalene, 690.
$C_{13}H_{14}N_2$ 7-Amino-1:2:3:4-tetrahydroacridine, and its picrate, 696.
$C_{13}H_{16}O_2$ 5-Methoxy-1:1-dimethyl-β-tetralone, 691.
$C_{13}H_{16}O_3$ 2-Keto-5-β-*p*-methoxyphenylethyltetrahydrofuran, 35.
$C_{13}H_{16}O_5$ ε-Phenoxypentane-αβ-dicarboxylic acid, 423.
$C_{13}H_{18}O_2$ *p*-*n*-Hexylbenzoic acid, 308.
$C_{13}H_{24}O_2$ Brassylic semialdehyde, 482.
$C_{13}H_{32}N_4$ Tetrakisdimethylaminomethylmethane, 168; formation and thermal decomposition of salts of, 175.
$C_{13}H_{33}N$ Benzyl-*n*-propylnonylamine, 403.

13 III

$C_{13}H_8O_4N_4$ 2:4-Dimethylpent-2-enal 2:4-dinitrophenylhydrazone, 732.
$C_{13}H_8O_2Cl_2$ 2:5-Dichloro-4′-hydroxybenzophenone, 356.
$C_{13}H_8O_2S$ Benzthio-oxindole-3-aldehydes, 414.
$C_{13}H_9ON$ 4-Cyanodiphenyl ether, 113.
$C_{13}H_9N_2Cl$ Chloroaminoacridines, 379.
Chloromethylpyridoquinolines, 215.
$C_{13}H_{10}ON_2$ Hydroxymethylpyridoquinolines, 216.
$C_{13}H_{10}O_3Br_2$ Dibromoacetoxymethoxynaphthalenes, 237.

$C_{13}H_{10}O_4S$ 3-Carboxynaphthyl-2-thioglycollic acid, 410.
$C_{13}H_{11}NBr_2$ 4:4′-Dibromobenzhydrylamine, and its hydrochloride, 372.
$C_{13}H_{12}ON_2$ 4-Amidinodiphenyl ether, 110.
$C_{13}H_{12}O_2N_2$ 7-Nitro-1:2:3:4-tetrahydroacridine, and its picrate, 696.
$C_{13}H_{12}O_2N_2$ 2-*p*-Anisidinonicotinic acid, 726.
$C_{13}H_{12}NCl$ Chloro-1:2:3:4-tetrahydroacridines, and their picrates, 695.
$C_{13}H_{12}NBr$ Bromo-1:2:3:4-tetrahydroacridines, and their picrates, 695.
$C_{13}H_{12}NI$ 7-Iodo-1:2:3:4-tetrahydroacridine, and its picrate, 696.
$C_{13}H_{12}N_2I_2$ 3:3′-Di-iodo-4:4′-diaminodiphenylmethane, 715.
$C_{13}H_{13}ON$ 7-Hydroxy-1:2:3:4-tetrahydroacridine, and its picrate, 696.
$C_{13}H_{13}O_2N$ Propenylethinylcarbinol phenylurethane, 734.
$C_{13}H_{14}O_3N$ 1-(Nitrophenyliminomethyl)*cyclo*hexan-2-ones, 696.
$C_{13}H_{14}O_4N_4$ 3-Methylsorbic aldehyde 2:4-dinitrophenylhydrazone, 737.
$C_{13}H_{14}O_5Br_2$ Dibromo-ε-phenoxypentane-αβ-dicarboxylic acid, 423.
$C_{13}H_{15}O_2N$ 1-(*p*-Hydroxyphenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{13}H_{15}O_3N$ ε-Phenoxypentane-αβ-dicarboxyimide, 423.
$C_{13}H_{15}O_4N$ *dl*-γ-Methyl-α-ethylallyl *p*-nitrobenzoate, 26.
$C_{13}H_{17}O_2N_3$ 5-Methoxy-1-methyl-β-tetralone semicarbazone, 690.
$C_{13}H_{19}ON$ *p*-*n*-Amylphenyl methyl ketoxime, 308.
$C_{13}H_{19}ON_3$ *p*-*n*-Butylphenyl methyl ketone semicarbazone, 308.
$C_{13}H_{19}O_2N$ Ethylpropylcarbinol phenylurethane, 735.
$C_{13}H_{22}O_5N_2$ 6:6-Diethoxy-3-methylhex-4-yn-3-ol urethane, 736.

13 IV

$C_{13}H_4OBr_2D_4$ 4:4′-Dibromo-2:3:5:6-tetradeuterobenzophenone, 372.
$C_{13}H_6O_2N_2Cl_2$ Dichloronitroacridines, 380.
$C_{13}H_7O_3N_2Cl$ 3-Chloro-3-nitroacridone, 380.
$C_{13}H_7O_3N_2Cl$ 4-Nitro-*C*-(*p*-chlorophenyl)anthranil, 380.
$C_{13}H_7O_4N_2Cl$ 8-Chloro-2-nitro-10-hydroxyacridone, 380.
$C_{13}H_7NBr_2D_4$ 4:4′-Dibromo-2:3:5:6-tetradeuterobenzhydrylamine, 372.
$C_{13}H_8O_2N_3Br$ 7-Bromo-1-phenylbenztriazole-5-carboxylic acid, 505.
$C_{13}H_8O_2N_2Cl_2$ 2:5-Dichlorobenz-*m*-nitroanilide, 356.
$C_{13}H_9ON_2Cl$ 8-Chloro-2-aminoacridone, 381.
$C_{13}H_9O_4N_2Cl$ Chloronitrodiphenylamine-2-carboxylic acids, 379.
$C_{13}H_9O_4N_2Br$ 2-Bromo-6-nitrodiphenylamine-4-carboxylic acid, 505.
$C_{13}H_{11}O_2N_2Br$ 2-Bromo-6-aminodiphenylamine-4-carboxylic acid, 505.
$C_{13}H_{11}O_2N_3S$ 2-Aminoacridine-7-sulphonamide, 183.
$C_{13}H_{12}O_3N_2S$ N^4-Benzoylsulphanilamide, 241.
$C_{13}H_{12}O_4N_2S$ 5:6:2′:3′-Pyridoquinolinium methyl sulphate, 217.
$C_{13}H_{14}ONCl$ 1-(Chlorophenyliminomethyl)*cyclo*hexan-2-ones, 695.
$C_{13}H_{14}ONBr$ 1-(Bromophenyliminomethyl)*cyclo*hexan-2-ones, 696.
$C_{13}H_{14}ONI$ 1-(*p*-Iodophenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{13}H_{14}O_6N_4S$ 2:4:5-Trinitro-*p*-toluenesulphon-1-naphthalide, 724.
$C_{13}H_{16}O_2N_2S$ 1-*p*-Toluenesulphonamido-2:5-dimethylpyrrole, 726.

13 V

$C_{13}H_{16}O_2N_3BrS$ Sulphanilylaminoethylpyridinium bromide, 242.

C_{14} Group.

$C_{14}H_{12}$ αα-Diphenylethylene, structure of, 567.

14 II

$C_{14}H_7N_3$ 3:6-Dicyanocarbazole, 502.
$C_{14}H_8N_4$ 4:4′-Dicyanoazobenzene, 112.
$C_{14}H_{10}O_2$ Benzil, structure of, 661.
$C_{14}H_{10}Cl_2$ αα-Di-*p*-chlorophenylethylene, 568.
$C_{14}H_{10}Br_2$ αα-Di-*p*-bromophenylethylene, 568.
$C_{14}H_{10}F_2$ αα-Di-*p*-fluorophenylethylene, 568.
$C_{14}H_{11}N_3$ 4-Amidino-2′-cyanodiphenyl, 110.
$C_{14}H_{12}O_2$ 2:7-Dihydroxy-9:10-dihydrophenanthrene, 687.
$C_{14}H_{12}O_4$ Hydroxy-4-(4′-hydroxyphenoxy)acetophenones, 350, 351.
4-(4′-Methoxyphenoxy)benzoic acid, 349, 352.
4-Phenoxy-2-methoxybenzoic acid, 352.
$C_{14}H_{14}O_2$ 3:3′-Dihydroxydibenzyl, 687.
$C_{14}H_{14}N_6$ 4:4′-Diamidinoazobenzene, dihydrochloride of, 111.
$C_{14}H_{15}N$ Methyl-1:2:3:4-tetrahydroacridines, and their picrates, 695.
$C_{14}H_{15}N_5$ 4:4′-Diamidinodiphenylamine, salts of, 111, 116.
$C_{14}H_{16}O_5$ 1-Hydroxy-1-γ-ketobutyl-2-keto-1:2:3:4-tetrahydronaphthalene, 688.
$C_{14}H_{16}O_4$ γ-Methyl-α-ethylallyl hydrogen phthalates, 24.
$C_{14}H_{16}O_7$ ε-Phenoxypentane-αββ-tricarboxylic acid, 423.
$C_{14}H_{18}O_4$ *dl*-Ethyl-*n*-propylcarbinyl hydrogen phthalate, 25.
$C_{14}H_{20}O_2$ Acetyl-1-ethinylgeraniol, 733.
p-*n*-Heptylbenzoic acid, 308.
1-(γ-Hydroxybutyl)-2-hydroxy-1:2:3:4-tetrahydronaphthalene, 688.
$C_{14}H_{22}O$ Irone, absorption spectrum of, 95.
3-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-1-methylcrotonaldehyde, 732.

$C_{14}H_{24}O$ 4:7-Dimethyl-2-*iso*propyl-5-hydrindanone, 561.
Perhydro-2-methyl-5:6-benzochroman, 688.
$C_{14}H_{24}O_3$ β-(2-Acetyl-4-*iso*propyl*cyclo*pentyl)butyric acid, 562.
$C_{14}H_{26}O$ *n*-Amyl β-*n*-amyl*iso*propenyl ketone, 496.
$C_{14}H_{26}O_3$ Methyl brassylate semialdehyde, 482.
$C_{14}H_{28}O_2$ 2:2-Dimethyl-lauric acid, 492.

14 III

$C_{14}H_8ON_2$ 4:4′-Dicyanodiphenyl ether, 113.
$C_{14}H_9O_6N_3$ 1-Nitrocarbazole-3:6-dicarboxylic acid, 503.
$C_{14}H_8N_2S$ 4:4′-Dicyanodiphenyl sulphide, 113.
$C_{14}H_9N_2Cl$ *N*-4-Cyanophenylbenziminochloride, 116.
$C_{14}H_9N_2Br$ 6-Bromo-4-phenylcinnoline, 355.
$C_{14}H_{10}ON_2$ 2′-Ketopiperazino(6′:4′:1:9)carbazole, 505.
$C_{14}H_{10}O_2Cl_2$ 2:5-Dichloro-2′-hydroxy-5′-methylbenzophenone, 357.
$C_{14}H_{10}O_3N_2$ 1-Nitro-9-acetylcarbazole, 502.
$C_{14}H_{10}O_9N_4$ 3:5-Dihydroxy-2-formylbenzoic acid 2:4-dinitrophenylhydrazone, 369.
$C_{14}H_{11}O_2Cl$ 4-Chloro-4′-acetoxydiphenyl, 583.
$C_{14}H_{12}OS$ Desylthiol, 93.
$C_{14}H_{12}NBr$ α-Phenyl-α-(5-bromo-2-aminophenyl)ethylene, sulphate of, 355.
$C_{14}H_{13}O_2N$ 1:2:3:4-Tetrahydroacridine-7-carboxylic acid, 696.
$C_{14}H_{13}N_3S$ *p*-Thioacetamidoazobenzene, 641.
$C_{14}H_{14}N_4S$ 4:4′-Diamidinodiphenyl sulphide, 110.
$C_{14}H_{14}N_4S_2$ 4:4′-Diamidinodiphenyl disulphide, dihydrochloride of, 111.
$C_{14}H_{15}ON$ Methoxy-1:2:3:4-tetrahydroacridines, and their picrates, 696.
$C_{14}H_{15}O_2N$ *iso*Butenylethinylcarbinol phenylurethane, 735.
$C_{14}H_{15}O_3N$ 1-(*o*-Carboxyphenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{14}H_{16}ON_2$ Cinchoninodiethylamide, and its picrate, 431.
$C_{14}H_{17}ON$ 1-(Phenyliminomethyl)-4-methyl*cyclo*hexan-2-one, 695.
1-(Tolyliminomethyl)*cyclo*hexan-2-ones, 695.
$C_{14}H_{17}O_2N$ 1-(Methoxyphenyliminomethyl)*cyclo*hexan-2-ones, 696.
$C_{14}H_{19}ON_3$ 2:4-Dimethylpent-2-enal phenylsemicarbazone, 732.
$C_{14}H_{19}O_2N_3$ 5-Methoxy-1:1-dimethyl-β-tetralone semicarbazone, 691.
$C_{14}H_{21}ON$ *p*-*n*-Hexylphenyl methyl ketoxime, 308.
$C_{14}H_{21}ON_3$ *p*-*n*-Amylphenyl methyl ketone semicarbazone, 308.
$C_{14}H_{25}O_2N$ β-Methyl-β-*n*-octylglutarimide, 494.
$C_{14}H_{27}O_3N_3$ Brassylic semialdehyde semicarbazone, 482.

14 IV

$C_{14}H_8O_2N_2S$ 4:4′-Dicyanodiphenylsulphone, 113.
$C_{14}H_9ON_2Cl$ 6-Chloro-4-(4′-hydroxyphenyl)cinnoline, 357.
$C_{14}H_8O_3N_2S$ 4:4′-Dicyanobenzenesulphonanilide, 115.
$C_{14}H_9O_4N_2Cl$ 8-Chloro-2-nitro-10-methoxyacridone, 381.
$C_{14}H_{10}O_2NCl$ Chloromethoxyanthroxan, 356.
$C_{14}H_{11}ONBr_2$ Formo-4:4′-dibromobenzhydrylamide, 372.
$C_{14}H_{11}ON_2Br$ 1-ω-Bromoacetamidocarbazole, 505.
$C_{14}H_{11}O_4N_2Br$ Methyl 2-bromo-6-nitrodiphenylamine-4-carboxylate, 505.
$C_{14}H_{12}ONCl$ α-(5-Chloro-2-aminophenyl)-α-(4′-hydroxyphenyl)ethylene, 356.
$C_{14}H_{12}O_2NCl$ 5-Chloro-2-amino-4′-methoxybenzophenone, 356.
$C_{14}H_{12}O_3N_2S$ 4-Amino-4′-carboxyformamidodiphenylsulphone, 43.
$C_{14}H_{13}O_2NS$ 1-Acetamido-1-naphthylthioglycollic acid, 415.
$C_{14}H_{14}ONBr$ Phenyl-(5-bromo-2-aminophenyl)methylcarbinol, 355.
$C_{14}H_{14}O_4N_4S$ 4:4′-Diamidinodiphenylsulphone, dihydrochloride of, 110.
$C_{14}H_{16}O_3N_5S$ 4:4′-Diamidinobenzenesulphonanilide, dihydrochloride of, 111.

14 V

$C_{14}H_7ONBr_2D_4$ Formo-4:4-dibromo-2:3:5:6-tetradeuterobenzhydrylamide, 372.

C_{15} Group.

$C_{15}H_{18}$ Vetivazulene, synthesis of, 559.
$C_{15}H_{26}$ Dihydrofarnesene, 120.

15 II

$C_{15}H_{11}N$ 4-Cyanostilbene, 112.
$C_{15}H_{12}O_2$ 2-Hydroxy-7-methoxyphenanthrene, 686.
$C_{15}H_{12}O_4$ Diphenylmethane-2:4′-dicarboxylic acid, 210.
$C_{15}H_{12}O_5$ 4-(4′-Acetoxyphenoxy)benzoic acid, 349.
$C_{15}H_{13}N$ 3-Benzylindole, 682.
2:3-Dimethyl-5:6-benzoquinoline, and its picrate, 695.
$C_{15}H_{14}O_2$ 2-Hydroxy-7-methoxy-9:10-dihydrophenanthrene, 687.
$C_{15}H_{14}O_3$ 4-(4′-Methoxyphenoxy)acetophenone, 351.
$C_{15}H_{14}O_4$ Ethyl 4-(4′-hydroxyphenoxy)benzoate, 349.
β-4-(4′-Hydroxyphenoxy)phenylpropionic acid, 352.
4-*m*-Methoxyphenylacetylresorcinol, 688.
$C_{15}H_{14}O_5$ Ethyl 3-hydroxy-4-(4′-hydroxyphenoxy)benzoate, 350.
3-Methoxy-4-(4′-methoxyphenoxy)benzoic acid, 350.

$C_{15}H_{15}N_2$ 4-Amidinostilbene, hydrochloride of, 110.
$C_{15}H_{15}N_3$ 4-Amino-4′-amidinostilbene, dihydrochloride of, 110.
$C_{15}H_{16}O_2$ 2-Hydroxy-7-methoxy-1:2:3:4-tetrahydrophenanthrene, 687.
p-Methoxybenzhydryl methyl ether, 609.
$C_{15}H_{16}O_5$ Ethyl 3:4:5-trimethoxyphthalidylglyoxylate, 727.
$C_{15}H_{17}N$ 6:9-Dimethyl-1:2:3:4-tetrahydroacridine, and its picrate, 695.
$C_{15}H_{19}N$ 3-*cyclo*Hexyl-7-methylindole, 682.
$C_{15}H_{21}N$ 3-*n*-Heptylindole, 682.
$C_{15}H_{25}N$ Benzylethylhexylamine, 403.
$C_{15}H_{26}O_3$ α-Methyl-α-*n*-decylsuccinic anhydride, 495.
$C_{15}H_{28}O$ Dihydronerolidol, 119.
$C_{15}H_{29}Cl_3$ Dihydrofarnesene trihydrochloride, 120.

15 III

$C_{15}H_8ON_2$ 4:4′-Dicyanobenzophenone, 111.
$C_{15}H_9ON_3$ 4:4′-Dicyanobenzanilide, 115.
$C_{15}H_{10}ON_2$ 3-Cyano-9-acetylcarbazole, 502.
Cyanophenyl 4-cyanobenzyl ethers, 113.
4:4′-Dicyanobenzhydrol, 111.
$C_{15}H_{10}O_2N_2$ 4:4′-Dicyanodiphenoxymethane, 114.
4-Nitro-4′-cyanostilbene, 112.
$C_{15}H_{10}O_3N_2$ 8-Quinolyl *p*-nitrophenyl ether, 242.
$C_{15}H_{11}ON$ 4-Phenoxyquinoline, and its salts, 383.
$C_{15}H_{11}O_5N_3$ 2-Nitro-4-cyanophenyl 4-nitro-β-phenylethyl ether, 115.
$C_{15}H_{12}O_2N_2$ 4-Cyanobenzyl phenylurethane, 114.
$C_{15}H_{12}O_3N_2$ 2:4′-Dihydroxy-4-4″-iminazolyldiphenyl ether, and its picrate, 350.
$C_{15}H_{12}O_8N_4$ Methyl 3:5-dihydroxy-2-formylbenzoate 2:4-dinitrophenylhydrazone, 369.
$C_{15}H_{13}ON$ 4-Cyanophenyl β-phenylethyl ether, 115.
$C_{15}H_{13}O_2N_3$ 4-Nitro-4′-amidinostilbene, hydrochloride of, 110.
$C_{15}H_{14}ON_4$ 4:4′-Diamidinobenzophenone, dihydrochloride of, 110.
$C_{15}H_{14}O_2N_2$ 2-Pyrrolidone-5-carboxy-α-naphthalide, 243.
$C_{15}H_{14}O_6N_2$ Ethyl 3-*p*-nitrobenzoyloxy-4-methylpyrrole-2-acetate, 426.
$C_{15}H_{15}ON$ Acetyl-1:2:3:4-tetrahydroacridine, and its picrate, 696.
3-(Naphthyliminomethyl)butan-2-ones, 695.
$C_{15}H_{15}ON_5$ 4:4′-Diamidinobenzanilide, 111.
$C_{15}H_{15}O_3N_3$ 4-Nitro-2-benzylideneaminodimethylaniline, 756.
$C_{15}H_{15}O_3N_3$ 4-(4′-Methoxyphenoxy)benzaldehyde semicarbazone, 353.
$C_{15}H_{15}NS$ Thioacetobenzylanilide, 641.
$C_{15}H_{16}ON_2$ 7-Acetamido-1:2:3:4-tetrahydroacridine, 696.
$C_{15}H_{16}ON_4$ Amidinophenyl 4-amidinobenzyl ethers, dihydrochlorides of, 110.
4:4′-Diamidinobenzhydrol, dihydrochloride of, 110.
$C_{15}H_{16}ON_6$ 4:4′-Diamidinodiphenylurea dimethanesulphonate, 111.
$C_{15}H_{16}O_2N_4$ 4:4′-Diamidinodiphenoxymethane, dihydrochloride of, 110.
$C_{15}H_{17}O_2N$ 1-(*m*-Acetylphenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{15}H_{17}O_3N$ 1-(*o*-Carbomethoxyphenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{15}H_{19}ON$ 1-(*p*-Xylyliminomethyl)*cyclo*hexan-2-one, 695.
$C_{15}H_{23}ON$ *p*-*n*-Heptylphenyl methyl ketoxime, 308.
$C_{15}H_{23}ON_3$ *p*-*n*-Hexylphenyl methyl ketone semicarbazone, 308.
$C_{15}H_{25}N_3S$ 3-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-1-methylcrotonaldehyde thiosemicarbazone, 732.
$C_{15}H_{27}O_2N$ α-Methyl-α-*n*-decylsuccinimide, 495.
$C_{15}H_{27}O_3N_3$ β-(2-Acetyl-4-*iso*propyl*cyclo*pentyl)butyric acid semicarbazone, 562.

15 IV

$C_{15}H_9O_2NBr$ 3:5-Dibromo-6-methoxyphthalanil, 239.
$C_{17}H_{16}O_3NBr$ 5-Bromo-6-methoxyphthalanil, 239.
$C_{15}H_{11}ON_2Cl$ 6-Chloro-4-(2′-hydroxy-5′-methylphenyl)cinnoline, 358.
$C_{15}H_{12}O_2NCl$ 5-Chloro-2-amino-2′-methoxyanthroxan, 357.
$C_{15}H_{13}O_3N_2Br$ 2-Bromo-6-acetamidodiphenylamine-4-carboxylic acid, 505.
$C_{15}H_{14}ONCl$ α-(5-Chloro-2-aminophenyl)-α-(2′-hydroxy-5′-methylphenyl)ethylene, 357.
$C_{15}H_{14}O_2NCl$ 5-Chloro-2-amino-2′-methoxy-5′-methylbenzophenone, 357.
$C_{15}H_{14}O_4N_2S$ 4-Benzylideneaminobenzenesulphonylglycine, 242.
$C_{15}H_{15}NS$ *p*-(2-1:2:3:4-Tetrahydro*iso*quinolyl)benzenesulphonic acid, 740.
$C_{15}H_{16}O_3N_2S$ 2-*p*-Aminobenzenesulphonyl-1:2:3:4-tetrahydro*iso*quinoline, 739.
p-(2-1:2:3:4-Tetrahydro*iso*quinolyl)benzenesulphonamide, 740.
$C_{15}H_{16}O_6N_2S$ Pyridine acetamidoacetoxybenzenesulphonates, 709.
$C_{15}H_{17}O_4N_5S_2$ Disulphanilylethyleneguanidine, 241.

15 V

$C_{15}H_{14}O_5N_2SHg$ 2′-Acetoxymercuri-3′-hydroxybenzylidenesulphanilamide, 242.

C_{16} Group.

$C_{16}H_{18}$ 3-*tert.*-Butylacenaphthene, 563.

16 II

$C_{16}H_{10}N_2$ Dicyanostilbenes, 111, 112.
$C_{16}H_{12}O_6$ 2:7-Dihydroxy-9:10-dihydrophenanthrene-3:8-dicarboxylic acid, 687.

$C_{16}H_{12}N_2$ Quinoline-4-aldehyde anil, 431.
$C_{16}H_{14}O_2$ 3-*tert.*-Butylacenaphthenequinone, 564.
$C_{16}H_{14}O_3$ 4-*tert.*-Butylnaphthalic anhydride, 563.
$C_{16}H_{14}O_4$ 2-Hydroxy-7-methoxy-9:10-dihydrophenanthrene-3-carboxylic acid, 687.
4-(4′-Methoxyphenoxy)cinnamic acid, 352.
$C_{16}H_{14}O_5$ Methyl 2:4-dihydroxy-5-phenylacetylbenzoate, 687.
Methyl 2-hydroxy-4-phenylacetoxybenzoate, 687.
$C_{16}H_{14}N_2$ *N*-Phenyl-lepidylamine, 431.
$C_{16}H_{16}O_2$ 2:7-Dimethoxy-9:10-dihydrophenanthrene, 686.
$C_{16}H_{16}O_4$ Ethyl 5-phenoxy-2-methoxybenzoate, 352.
Methyl 2:4-dihydroxy-5-phenylethylbenzate, 688.
$C_{16}H_{16}N_4$ Diaminostilbenes, salts, 110.
$C_{16}H_{18}N_4$ 4:4′-Diamidinomethyldiphenyl, dihydrochloride of, 110.
4:4′-Dimethylamidinodiphenyl, dihydrochloride of, 110.
$C_{16}H_{22}O$ 1-Keto-3-*cyclo*hexenyl-Δ^2-octahydrophenanthrene, 395.
$C_{16}H_{24}O$ 6-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-4-methylhex-4-en-1-yn-2-ol, 733.
$C_{16}H_{24}O_3$ 12-Acetyl-9-ketotetradecahydrophenanthrenes, 394.
$C_{16}H_{25}N$ Benzylidenenonylamine, 403.
$C_{16}H_{27}N$ Benzyl-*n*-nonylamine, and its hydrochloride, 403.
Benzyl-*n*-propylhexylamine, 403.
$C_{16}H_{28}O_2$ 5-Methyl-2-butyl-5-*n*-amyl*cyclo*hexane-1:3-dione, 496.
$C_{16}H_{28}N_2$ α-Diethylamino-δ-amylbenzylamine, 427.
$C_{16}H_{29}N_3$ α-Diethylamino-δ-amyl-*m*-aminobenzylamine, 427.
$C_{16}H_{32}O_2$ 3:3-Dimethyltetradecoic acid, 494.
$C_{16}H_{34}O$ 1-Methyl-1-heptyloctan-1-ol, 493.

16 III

$C_{16}H_{10}ON_2$ 4:4′-Dicyanodeoxybenzoin, 115.
$C_{16}H_{13}ON_2$ Cinchoninanilide, 437.
4-Cyanophenyl 4-cyano-β-phenylethyl ether, 116.
ω-Cyano-*p*-tolyl 4-cyanobenzyl ether, 113.
4:4′-Dicyanodibenzyl ether, 114.
$C_{16}H_{12}O_2N_2$ 4:4′-Dicyano-αβ-diphenoxyethane, 114.
$C_{16}H_{12}O_4N_2$ ω-Diazo-4-(4′-acetoxyphenoxy)acetophenone, 349.
Phenylethinylcarbinol *p*-nitrophenylurethane, 734.
$C_{16}H_{13}ON$ 2-Phenoxylepidine, 383.
4-Phenoxyquinaldine, 383.
$C_{16}H_{13}ON_3$ 4:4′-Dicyano-β-phenoxyethylaniline, 114.
$C_{16}H_{13}O_2N$ Phenylethinylcarbinol phenylurethane, 734.
Vinylethinylcarbinol α-naphthylurethane, 735.
$C_{16}H_{13}N_2Cl$ *N*-Phenyl-6-chlorolepidylamine, 431.
$C_{16}H_{14}O_2N_2$ 4-Nitro-4′-acetamidostilbene, 112.
$C_{16}H_{15}O_2N$ 4-*tert.*-Butylnaphthalimide, 563.
$C_{16}H_{16}ON_4$ 4:4′-Diamidinodeoxybenzoin, dihydrochloride of, 110.
$C_{16}H_{16}O_2I_2$ 6:6′-Di-iodo-3:3′-dimethoxydibenzyl, 686.
$C_{16}H_{16}O_2S$ β-(Benzhydrylthio)propionic acid, 95.
$C_{16}H_{16}O_4N_4$ β-Phenylethyl methyl ketone dinitrophenylhydrazone, 62.
$C_{16}H_{17}O_2N$ Carbethoxy-1:2:3:4-tetrahydroacridines, and their picrates, 696.
$C_{16}H_{17}O_3N_3$ *N*-Nitroso-*p*-toluidinoaceto-*p*-toluidide, 54.
$C_{16}H_{17}O_3N_3$ β-*o*-Methoxyphenylpropaldehyde *p*-nitrophenylhydrazone, 182.
$C_{16}H_{17}O_4N_3$ *N*-Nitroso-*p*-anisidineaceto-*p*-anisidide, 54.
$C_{16}H_{17}N_2I$ 2-Anilinovinylquinoline methiodide, 712.
$C_{16}H_{17}N_3S$ 2-Thioacetamido-5:4′-dimethylazobenzene, 641.
$C_{16}H_{18}ON_4$ 4-Amidinomethylphenyl 4-amidinobenzyl ether, 110.
4-Amidinophenyl 4-amidino-β-phenylethyl ether, dihydrochloride of, 110.
4:4′-Diamidinodibenzyl ether, and its dihydrochloride, 110.
$C_{16}H_{18}O_2N_4$ 4:4′-Diamidino-αβ-diphenoxyethane, dihydrochloride of, 110.
$C_{16}H_{18}O_3N_4$ 4:4′-Diamidinodiphenoxydimethyl ether, and its dihydrochloride, 111.
$C_{16}H_{18}O_3S$ *p*-Tolyl-α-anisylethylsulphone, 610.
$C_{16}H_{19}O_3N$ 1-(Carbethoxyphenyliminomethyl)*cyclo*hexan-2-ones, 696.
$C_{16}H_{22}O_2N_2$ αα′-Dicyano-β-methyl-β-octylglutarimide, 494.
$C_{16}H_{26}ON_2$ *p*-*n*-Heptylphenyl methyl ketone semicarbazone, 308.
$C_{16}H_{25}O_3N$ 12-Acetyl-9-ketotetradecahydrophenanthrene oximes, 394.
$C_{16}H_{25}O_5N$ Tetramethyl *l*-galactose anilide, 754.
$C_{16}H_{28}O_2N_2$ Ethyl β-keto-αγ-di-(1-methyl-2-pyrrolidyl)butyrate dipicrate, 424.
$C_{16}H_{23}ON$ 1-Keto-3-*cyclo*hexenyl-Δ^2-octahydrophenanthrene oxime, 395.

16 IV

$C_{16}H_6O_6N_2Cl_6$ 1-Nitro-3:6-bistrichloroacetylcarbazole, 503.
$C_{16}H_9N_2Cl_2Br$ 2-Bromo-1-2′:5′-dichlorobenzeneazonaphthalene, 437.
$C_{16}H_{10}O_2NBr$ 6-Bromo-2-anilino-5-hydroxy-1:4-naphthaquinone, 238.
$C_{16}H_{10}N_2ClBr$ 2-Bromo-1-3′-chlorobenzeneazonaphthalene, 437.
$C_{16}H_{11}ON_2Cl$ 6-Chlorocinchoninanilide, 431.
$C_{16}H_{12}O_8N_2S$ 4:4′-Biscarboxyformamidodiphenylsulphone, 43.
$C_{16}H_{12}O_3NS$ 6-Ethoxythionaphthenquinone-2-*p*-hydroxyanil, 410.
$C_{16}H_{13}O_2N_3S$ N^1-Lepidylsulphanilamide, 428.
N^4-(2′-Lepidyl)sulphanilamide, 758.
N^4-(4′-Quinaldyl)sulphanilamide, 758.

$C_{16}H_{16}O_2NBr$ Phenyl-(5-bromo-2-acetamidophenyl)methylcarbinol, 355.
$C_{16}H_{16}O_4N_4S$ 2-(2′-Pyrrolidone-5′-carboxy-4″-aminobenzenesulphamido)pyridine, 243.
$C_{16}H_{16}O_5N_2S$ Acetamidoacetoxybenzenesulphonanilides, 709.
$C_{16}H_{17}O_2NS$ 2-*p*-Toluenesulphonyl-1:2:3:4-tetrahydro*iso*quinoline, 739.
$C_{16}H_{18}O_6N_4S_2$ *s*-Di-*p*-acetamidobenzenesulphonhydrazide, 740.

16 V

$C_{16}H_{11}O_{10}N_3I_2S_3$ 2-(2′:6′-Di-iodo-4′-sulphobenzeneazo)-1-amino-8-naphthol-3:6-disulphonic acid, trisodium salt, 716.
$C_{16}H_{13}ON_2ClS$ Chloromethylthio-oxindole-3-aldehyde phenylhydrazones, 414.
$C_{16}H_{14}O_2N_2ClS$ N^1-(6-Chlorolepidyl)sulphanilamide, 429.
$C_{16}H_{14}O_{10}N_3S_2As$ 1-(4′-Arsonobenzeneazo)-2-amino-8-naphthol-3:6-disulphonic acid, tetrapotassium salt, 715.

16 VI

$C_{16}H_{12}O_{10}N_3I_2S_2As$ 2-(2′:6′-Di-iodo-4′-arsonobenzeneazo)-1-amino-8-naphthol-3:6-disulphonic acid, tetrasodium salt, 715.

C_{17} Group.

$C_{17}H_{12}O_4$ Phenylethinylcarbinyl hydrogen phthalate, 734.
$C_{17}H_{14}O_7$ 3-Acetoxy-4-(4′-acetoxyphenoxy)benzoic acid, 350.
$C_{17}H_{14}N_2$ 4:4′-Dicyano-$\alpha\gamma$-diphenylpropane, 112.
$C_{17}H_{15}N$ 6:7:8:9-Tetrahydro-1:2-benzacridine, and its picrate, 695.
$C_{17}H_{16}O_4$ Methyl 4-(4′-methoxyphenoxy)cinnamate, 352.
$C_{17}H_{17}N$ 3-γ-Phenylpropylindole, 682.
$C_{17}H_{18}O_4$ Ethyl β-4-(4′-hydroxyphenoxy)phenylpropionate, 352.
Methyl β-4-(4′-methoxyphenoxy)phenylpropionate, 352.
$C_{17}H_{18}Cl_2$ 4:4′-Dichloromethyl-$\alpha\gamma$-diphenylpropane, 112.
$C_{17}H_{20}O_2$ 4:4′-Dihydroxymethyl-$\alpha\gamma$-diphenylpropane, 112.
$C_{17}H_{20}O_3$ 2:5:3′-Trimethoxydibenzyl, 687.
$C_{17}H_{20}N_4$ 4:4′-Diamidinodiphenylpropane, dihydrochloride of, 110.
$C_{17}H_{22}O_2$ *d*-6″-Hydroxy-2:2:5′:4″-tetramethyl-3′:4′:5′:6′-tetrahydrodibenzopyran, 187.
$C_{17}H_{24}O_3$ 2-Phenacyl-2-methyloctoic acid, 496.
$C_{17}H_{26}O$ 7-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-5-methylhepta-3:5-dien-2-one, 733.
$C_{17}H_{29}N$ Benzyl-*n*-butylhexylamine, 402.
$C_{17}H_{30}O_3$ 1-β-Ketononyl*cyclo*hexane-1-acetic acid, 495.
$C_{17}H_{32}O_3$ 5-Keto-3-methyl-3-*n*-hexylnonoic acid, 494.

17 III

$C_{17}H_{10}ON_2$ 4:4′-Dicyanobenzylideneacetophenone, 113.
$C_{17}H_{11}ON$ 9-Amino*meso*benzanthrone, 211.
$C_{17}H_{12}O_6N_2$ 4:4′-Dinitro-$\alpha\delta$-diphenylbutadiene-α-carboxylic acid, 112.
$C_{17}H_{14}O_2N_2$ 4:4′-Dicyano-$\alpha\gamma$-diphenoxypropane, 114.
$C_{17}H_{15}ON_3$ 2-Benzeneazo-6-methoxylepidine, 383.
4-Benzeneazo-6- and -8-methoxyquinaldines, 382.
$C_{17}H_{15}O_2N$ 2-Phenoxy-6-methoxylepidine, 383.
4-Phenoxy-6- and -8-methoxyquinaldines, 383.
Propenylethinylcarbinol β-naphthylurethane, 734.
$C_{17}H_{16}ON_4$ 4:4′-Diamidinobenzylideneacetophenone, dihydrochloride of, 110.
$C_{17}H_{16}O_2S$ β-Desylthiopropionic acid, 94.
$C_{17}H_{17}ON$ 1-(Naphthyliminomethyl)*cyclo*hexan-2-ones, 695.
$C_{17}H_{17}O_2N$ 4-*tert.*-Butylnaphthal-*N*-methylimide, 564.
$C_{17}H_{18}O_4N_4$ α-Benzyl-α-methylacetone dinitrophenylhydrazone, 63.
$C_{17}H_{20}O_2N_4$ 3:3′-Diamidino-$\alpha\gamma$-diphenoxypropane, dihydrochloride of, 110.
$C_{17}H_{25}ON_3$ 1-Keto-3-*cyclo*hexenyl-Δ^2-octahydrophenanthrene semicarbazone, 395.
$C_{17}H_{27}ON_3$ *p*-*n*-Octylphenyl methyl ketone semicarbazone, 308.
$C_{17}H_{30}ON_2$ α-Diethylamyl-δ-amyl-*p*-methoxybenzylamine, 427.

17 IV

$C_{17}H_9O_2ClS_2$ 5-Chloro-7-methylthioindigo, 412.
6-Chlorothioindirubin, 411.
$C_{17}H_{11}O_2NS$ 6:7-Benzthionaphthenquinone-2-*p*-hydroxyanil, 410.
$C_{17}H_{14}O_4N_2S$ 5-Nitro-*p*-toluenesulphon-1-naphthalide, 724.
$C_{17}H_{15}O_4N_3S$ N^4-Quininoylsulphanilamide, 243.
$C_{17}H_{16}O_2NCl$ 5-Chloro-2-acetamido-2′-methoxy-5′-methylbenzophenone, 357.
$C_{17}H_{17}ON_2Cl$ Substance, from furfural, aniline, and aniline hydrochloride, 506.
$C_{17}H_{17}ON_2I$ 2-Methylanilinovinylbenzoxazole ethiodide, 712.
$C_{17}H_{17}O_3N_3S$ N^1-(6-Methoxylepidyl)sulphanilamide, 428.
N^4-(6′-Methoxy-2′-lepidyl)sulphanilamide, 758.
N^4-(Methoxy-4′-quinaldyl)sulphanilamides, 758.
$C_{17}H_{17}N_2IS$ 2-Methylanilinovinylbenzthiazole methiodide, 712.
$C_{17}H_{18}O_3NCl$ 2-Chloro-4-*tert.*-butylphenyl *p*-nitrobenzyl ether, 678.
$C_{17}H_{18}O_3N_2S$ 2-*p*-Acetamidobenzenesulphonyl-1:2:3:4-tetrahydro*iso*quinoline, 739.
$C_{17}H_{19}O_3N_3S$ *p*-Acetamidobenzenesulphon-1-(1:2:3:4-tetrahydroquinolyl)amide, 740.
$C_{17}H_{23}O_4N_3S_2$ Methylenebis-*p*-toluenesulphonmethylamide, 30.
$C_{17}H_{23}O_4N_3S_2$ Bis(benzenesulphonmethylamidomethyl)methylamine, 30.

17 V

$C_{17}H_{10}O_2NClS$ Chloromethylthionaphthenindoleindigos, 414.
$C_{17}H_{11}O_9N_1L_2S_2$ 2-(2′:4′-Di-iodo-6′-carboxybenzeneazo)-1-amino-8-naphthol-3:6-disulphonic acid, trisodium salt, 716.
$C_{17}H_{14}O_7N_3IS_2$ 2-5′-Iodo-*o*-tolueneazo-1-amino-8-naphthol-3:6-disulphonic acid, disodium salt, 714.

C_{18} Group.

$C_{18}H_{10}O_3$ *meso*Benzanthronecarboxylic acids, 211.
$C_{18}H_{12}N_2$ 4:4′-Dicyano-αδ-diphenylbutadiene, 112.
$C_{18}H_{14}O_2$ 3:10-Diketo-3:4:9:10:11:12-hexahydro-1:2-benzanthracene, 586.
$C_{18}H_{16}O_6$ ω-Acetoxy-4-(4′-acetoxyphenoxy)acetophenone, 350.
Elliptol, 592.
$C_{18}H_{18}O_2$ 2:7-Dimethoxy-1:8-dimethylphenanthrene, 684.
$C_{18}H_{18}O_4$ γ-Phenyl-γ-benzylmethylsuccinic acid, 586.
$C_{18}H_{18}O_6$ Dihydroelliptol, 592.
$C_{18}H_{18}N_4$ 4:4′-Diamidino-αδ-diphenylbutadiene, dihydrochloride of, 110.
$C_{18}H_{20}O_6$ Tetrahydroelliptol, 593.
$C_{18}H_{22}N_4$ 2-(β-Diethylaminoethylamino)-5:6:2′:3′-pyridoquinoline, and its picrate, 218.
$C_{18}H_{26}O_2$ Acetyl-6-(2′:6′:6′-trimethyl*cyclo*hexenyl)-4-methylhex-4-en-1-yn-2-ol, 733.
$C_{18}H_{28}O_2$ Laurylbenzoquinone, 661.
$C_{18}H_{30}O_2$ Laurylquinol, 660.
$C_{18}H_{36}O_8$ Ethyl β-methylpentane-βδεε-tetracarboxylate, 208.
$C_{18}H_{31}N$ Benzyl-*n*-amylhexylamine, 403.
Benzylethylnonylamine, 403.
$C_{18}H_{34}O_2$ Ethyl 5-keto-3-methyl-3-*n*-amyldecoate, 496.
d-Oxidostearic acid, 390.
$C_{18}H_{34}O_8$ Bis-α-hydroxy-ω-carboxyoctyl peroxide, 219.
$C_{18}H_{36}O_4$ 9:10-Dihydroxystearic acid, 389.
$C_{18}H_{38}O_4$ Bis-α-hydroxynonyl peroxide, 220.

18 III

$C_{18}H_{12}O_2S_2$ 6-Ethoxythioindirubin, 411.
$C_{18}H_{16}O_2N_2$ 4:4′-Dicyano-αδ-diphenoxybutane, 114.
$C_{18}H_{16}O_6N_2$ Ethyl 1-nitrocarbazole-3:6-dicarboxylate, 503.
$C_{18}H_{17}ON_3$ 2-Benzeneazo-6-ethoxylepidine, 383.
$C_{18}H_{17}O_2N$ *iso*Butenylethinylcarbinol β-naphthylurethane, 735.
4-Methylhex-4-en-1-yn-3-ol α-naphthylurethane, 735.
2-Phenoxy-6-ethoxylepidine, 383.
4-Phenoxy-6- and -8-ethoxyquinaldines, 383.
$C_{18}H_{18}O_2N_2$ 2:3-Bisbenzamido-1-methyl*cyclo*propane, 174.
$C_{18}H_{21}O_2N$ 1-Methyl*cyclo*hexanol α-naphthylurethane, 136.
$C_{18}H_{21}O_2N_3$ *p*-*n*-Butylphenyl methyl ketone *p*-nitrophenylhydrazone, 308.
$C_{18}H_{22}O_2N_4$ 4:4′-Diamidino-αδ-diphenoxybutane, dihydrochloride of, 110.
$C_{18}H_{24}O_5N_2$ 5:5-Diethoxy-1-phenyl-2-methylpent-3-yn-2-ol urethane, 736.
$C_{18}H_{27}O_2N_3$ αα′-Dicyano-β-methyl-β-*n*-decylglutarimide, 495.
$C_{18}H_{29}ON_3$ 7-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-5-methylhepta-3:5-dien-2-one semicarbazone, 733.
$C_{18}H_{32}NI$ Benzyldimethylnonylammonium iodide, 403.

18 IV

$C_{18}H_{10}O_2Cl_2S_2$ 5:5′-Dichloro-7:7′-dimethylthioindigo, 412.
5:6′-Dichloro-4:4′-dimethylthioindigo, 412.
$C_{18}H_{13}ON_4Cl$ 3-Chloro-2:4-bisbenzeneazophenol, 434.
$C_{18}H_{13}ON_4Br$ 3-Bromo-2:4-bisbenzeneazophenol, 435.
$C_{18}H_{13}ON_4I$ 3-Iodo-2:4-bisbenzeneazophenol, 435.
$C_{18}H_{13}O_3NS$ 3-(6-Ethoxythionaphthen)indoleindigo, 414.
$C_{18}H_{13}O_6N_3S_2$ 4-(*p*-Nitrobenzenesulphonamido)-4′-nitrodiphenyl sulphide, 244.
$C_{18}H_{15}Cl_3AlAs$ Trichlorotriphenylarsinealuminium, 669.
$C_{18}H_{15}Cl_9AlAs_3$ Trichlorotris(phenyldichloroarsine)aluminium, 670.
$C_{18}H_{16}O_6N_2S$ 4:4′-Biscarboxyacetamidodiphenylsulphone, 43.
$C_{18}H_{19}O_2N_3S$ N^4-(6′-Ethoxy-2′-lepidyl)sulphanilamide, 758.
N^4-(Ethoxy-4′-quinaldyl)sulphanilamides, 758.

18 V

$C_{18}H_{16}O_3N_3ClS$ N^4-Acetyl-N^1-(6-chlorolepidyl)sulphanilamide, 429.

C_{19} Group.

$C_{19}H_{12}O_3$ Methyl *meso*benzanthronecarboxylates, 211.
$C_{19}H_{13}N$ 3-Phenylacridine, and its picrate, 695.
$C_{19}H_{17}N$ 7-Phenyl-1:2:3:4-tetrahydroacridine, and its picrate, 695.
$C_{19}H_{18}O_6$ Elliptol methyl ether, 592.
$C_{19}H_{18}N_2$ 7-Phenylamino-1:2:3:4-tetrahydroacridine, and its picrate, 696.

$C_{19}H_{22}O_{10}$ 5:5′-Methylenebis-2-hydroxy-3:4-dimethoxybenzoic acid, 727.
$C_{19}H_{24}N_4$ (β-Diethylaminoethylamino)methylpyridoquinolines, and their salts, 217.
$C_{19}H_{28}N_2$ α-Diethylamino-δ-amyl-lepidylamine, and its dipicrate, 427.
$C_{19}H_{30}O_2$ 5-Hydroxy-3-methyl-2-decylcoumarin, 661.
$C_{19}H_{32}O$ 8-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-3:6-dimethylocta-4:6-dien-3-ol, 733.
$C_{19}H_{32}O_5$ Ethyl 5-keto-6-acetyl-6-carbethoxy-3:3-dimethylundecoate, 493.
$C_{19}H_{38}O_2$ 1-Methyl-1-*n*-octyldecoic acid, 493.
$C_{19}H_{41}N$ Methylnonylamine, 403.

19 III

$C_{19}H_{13}O_2N$ 9-Acetamido*meso*benzanthrone, 211.
$C_{19}H_{13}O_3I$ 2-Keto-5-styryl-2:3-dihydrofuran, di-*o*-iodobenzoyl derivative, 35.
$C_{19}H_{14}ON_2$ 1-Benzamidocarbazole, 510.
$C_{19}H_{14}O_4N_2$ Phenyl *p*-nitrophenylimidocarbonate, 153.
$C_{19}H_{15}ON_3$ β-Benzoyl-αα-diphenylhydrazyl, equilibrium of, with dibenzoyltetraphenyltetrazan, 621.
$C_{19}H_{15}O_2N$ Phenyl phenylimidocarbonate, 153.
$C_{19}H_{16}N_3Cl$ *s*-Diphenyl-*p*-chlorophenylguanidine, hydrochloride of, 152.
$C_{19}H_{17}N_3S_2$ γ-Azatrimethin[2-(3-ethyldihydrobenzthiazole)][3-(2:4-benzthiazine)], 102.
$C_{19}H_{18}O_2N_2$ 4:4′-Dicyano-aε-diphenoxypentane, 114.
$C_{19}H_{19}ON$ 1-(Diphenylyl-4′-iminomethyl)*cyclo*hexan-2-one, 695.
$C_{19}H_{19}N_2I$ 2-Methylanilinovinylquinoline methiodide, 712.
$C_{19}H_{20}ON_2$ 1-(Phenylaminophenyliminomethyl)*cyclo*hexan-2-one, 696.
$C_{19}H_{20}O_5N_4$ 5-Methoxy-1:1-dimethyl-β-tetralone 2:4-dinitrophenylhydrazone, 691.
$C_{19}H_{21}O_2N$ 1:2-Dimethyl*cyclo*hexen-3-ol α-naphthylurethane, 137.
$C_{19}H_{23}O_2N$ *dl*-Ethyl-*n*-propyl carbinyl *p*-xenylurethane, 25.
$C_{19}H_{23}O_2N_3$ *p*-*n*-Amylphenyl methyl ketone *p*-nitrophenylhydrazone, 308.
$C_{19}H_{24}O_2N_4$ Diamidino-aε-diphenoxypentanes, salts of, 110.
$C_{19}H_{26}O_5N_2$ 5-Keto-3:3-dimethylundecoic acid 2:4-dinitrophenylhydrazone, 494.
$C_{19}H_{28}N_2Cl$ α-Diethylamino-δ-amyl-6-chlorolepidylamine, 429.
$C_{19}H_{39}ON$ 2-*n*-Octylundecamide, 493.

19 IV

$C_{19}H_{12}O_4N_2Cl_2$ *p*-Chlorophenyl *p*-nitrophenylimidocarbonate, 153.
$C_{19}H_{13}O_3ClS_2$ Chloro-6′-ethoxymethylthioindigos, 412.
Chloro-6′-ethoxymethylthioindirubins, 412.
$C_{19}H_{13}O_6N_2S$ Dinitro-9-*p*-toluenesulphonylcarbazoles, 510.
$C_{19}H_{14}O_2NBr$ Phenyl *p*-bromophenylimidocarbonate, 153.
$C_{19}H_{14}O_4N_2S$ Nitro-9-toluenesulphonylcarbazoles, 503, 504, 510.
$C_{19}H_{16}O_2N_2S$ 1-Amino-9-*p*-toluenesulphonylcarbazole, 510.
$C_{19}H_{19}O_4N_3S$ N^4-Acetyl-N^1-(6-methoxylepidyl)sulphanilamide, 428.
$C_{19}H_{26}ON_3Cl$ Diethyl-δ-aminoamylamine 6-chlorocinchoninamide, 429.

19 V

$C_{19}H_{14}O_2NBrS$ 3-Bromo-9-*p*-toluenesulphonylcarbazole, 510.

C_{20} Group.

$C_{20}H_{26}$ 3:4-Di-*tert.*-butylacenaphthene, 564.

20 II

$C_{20}H_{12}O_7$ Elliptonone, 593.
$C_{20}H_{14}O_3$ Ethyl *meso*benzanthronecarboxylates, 210.
$C_{20}H_{16}O_6$ Dehydrodihydroelliptones, 592.
Elliptone, reduction of, 587.
Elliptol *iso*flavone, 597.
$C_{20}H_{18}O_6$ Dehydrotetrahydroelliptone, 592.
Dihydroelliptones, 591.
$C_{20}H_{18}O_7$ Dehydrotetrahydromalaccol, 595.
Elliptol *iso*flavanonol, 597.
$C_{20}H_{18}O_8$ ω:3-Diacetoxy-4-(4′-acetoxyphenoxy)acetophenone, 350.
$C_{20}H_{20}O_5$ Dihydrodeoxyelliptones, 591.
$C_{20}H_{20}O_6$ Dihydroelliptic acid, 592.
$C_{20}H_{22}O_2$ 3:4-Di-*tert.*-butylacenaphthenequinone, 564.
$C_{20}H_{22}O_3$ 4:5-Di-*tert.*-butylnaphthalic anhydride, 564.
$C_{20}H_{22}O_6$ Tetrahydroelliptic acid, 593.
$C_{20}H_{22}O_9$ Tetrahydromalaccolic acid, 594.
$C_{20}H_{26}O_5$ Octahydrodeoxyelliptone, 591.
$C_{20}H_{28}O_7$ Ethyl ε-phenoxypentane-αββ-tricarboxylate, 423.
$C_{20}H_{28}O_{14}$ Hepta-acetyl *dl*-galactose, from 3:6-anhydro-β-methyl-*d*-galactoside, 749.
$C_{20}H_{32}O_2$ Myristylbenzoquinone, 661.
$C_{20}H_{32}O_3$ 2:5-Dimethoxylaurophenone, 660.
$C_{20}H_{34}O_2$ 2:5-Dimethoxylaurylbenzene, 660.
Myristylquinol, 660.
$C_{20}H_{24}O_8$ Ethyl octane-1:4:5:8-tetracarboxylate, 692.
$C_{20}H_{38}O_2$ Ethyl 3-methyl-3-(β-*cyclo*hexylethyl)nonoate, 495.
$C_{20}H_{38}O_3$ 5-Keto-3-methyl-3-*n*-octylundecoic acid, 494.
$C_{20}H_{40}O_2$ 2:2-Dimethylstearic acid, 492.

20 III

$C_{20}H_{16}O_2S_2$ Benzthioindirubins, 411.
$C_{20}H_{12}O_4N_4$ 5:5′-Dinitro-1:1′-azonaphthalene, 746.
$C_{20}H_{12}NCl$ 4′-Chloro-2′-methyl-1′-aza-3:4-benzpyrene, 377.
$C_{20}H_{12}N_2Cl_2$ 4:4′-Dichloro-1:1′-azonaphthalene, 47.
Dichloroazonaphthalenes, 746.
$C_{20}H_{13}ON$ 4′-Hydroxy-2′-methyl-1′-aza-3:4-benzpyrene, 377.
$C_{20}H_{15}O_2N$ Phenylethinylcarbinol β-naphthylurethane, 734.
$C_{20}H_{16}OS$ α-Benzoylbenzhydrylthiol, 94.
$C_{20}H_{16}O_4S_2$ 6:6′-Diethoxythioindirubin, 412.
$C_{20}H_{16}O_7N_4$ 3-Hydroxy-4-(4′-hydroxyphenoxy)acetophenone 2:4-dinitrophenylhydrazone, 351.
$C_{20}H_{17}O_2N$ Phenyl *p*-tolylimidocarbonate, 153.
$C_{20}H_{17}NS$ Thiobenzobenzylanilide, 641.
$C_{20}H_{18}O_2S$ *p*-Tolylbenzhydrylsulphone, 610.
$C_{20}H_{18}N_2S_2$ Trimethin[2-(3-ethyldihydrobenzthiazole)][3-(2:4-benzthiazine)], 101.
$C_{20}H_{20}O_2N_2$ 4:4′-Dicyano-αζ-diphenoxyhexane, 114.
$C_{20}H_{23}N_2I$ 2-(1:3-Dimethylquinoxaline)-1-(4-dimethylaminobenzene)dimethincyanine iodide, 712.
$C_{20}H_{23}O_2N$ 4:5-Di-*tert.*-butylnaphthalimide, 564.
$C_{20}H_{23}O_2N$ 4:5-Di-*tert.*-butylnaphthaloxime, 564.
$C_{20}H_{23}O_2N_3$ *p*-*n*-Hexylphenyl methyl ketone *p*-nitrophenylhydrazone, 308.
$C_{20}H_{26}O_2N_4$ 4:4′-Diamidino-αζ-diphenoxyhexane, dihydrochloride of, 110.
$C_{20}H_{26}O_4N_4$ 3-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-1-methylcrotonaldehyde 2:4-dinitrophenylhydrazone, 732.
$C_{20}H_{28}O_2N_2$ 2′:2′:6′-Trimethylpiperidinomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 404.
$C_{20}H_{30}O_2N_2$ Ethylhexylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 404.
$C_{20}H_{30}O_6N_4$ 5-Keto-3:3-dimethyl-lauric acid 2:4-dinitrophenylhydrazone, 495.
$C_{20}H_{31}ON_3$ α-Diethylamino-δ-amyl-6-methoxylepidylamine, 428.
$C_{20}H_{36}NI$ Benzyldiethylnonylammonium iodide, 403.

20 IV

$C_{20}H_{11}O_2NS$ Benzthionaphthenindole-indigos, 414.
$C_{20}H_{14}O_4N_2S$ 4-Amino-4′-phthalimidodiphenylsulphone, 44.
$C_{20}H_{15}O_2N_2Cl$ 3-Chlorodibenzaminophenols, 435.
$C_{20}H_{16}O_4N_2S$ N^1N^4-Dibenzoylsulphanilamide, 241.
$C_{20}H_{16}O_5N_2S$ 4-Amino-4′-*o*-carboxybenzamidodiphenylsulphone, 45.
$C_{20}H_{16}O_6N_2S$ 4:4′-Bis-succinimidodiphenylsulphone, 44.
$C_{20}H_{18}ON_2S$ Trimethin[2-(3-ethyldihydrobenoxazole)][3-(2:4-benzthiazine)], 101.
$C_{20}H_{18}N_2SSe$ Trimethin[2-(3-ethyldihydrobenzselenazole)][3-(2:4-benzthiazine)], 102.
$C_{20}H_{20}O_8N_2S$ 4:4′-Biscarbethoxyformamidodiphenylsulphone, 43.
4:4′-Bis-β-carboxypropionamidodiphenylsulphone, 44.
$C_{20}H_{34}O_3N_2S$ Sulphanilylmyristamide, 241.

C_{21} Group.

$C_{21}H_{14}N_2$ 4:4′-Dicyanotriphenylmethane, 111.
$C_{21}H_{14}N_4$ 4:4′-Dicyanobenzophenone phenylhydrazone, 111.
$C_{21}H_{16}O_3$ 4-Keto-1-phenyl-1:2:3:4-tetrahydro-2-phenanthroic acid, 587.
$C_{21}H_{16}O_4$ γ-Phenyl-γ-naphthylitaconic acid, 587.
$C_{21}H_{18}O_3$ *p*-Methoxybenzhydryl benzoate, 609.
$C_{21}H_{18}O_4$ γ-Phenyl-γ-naphthylmethylsuccinic acid, 587.
$C_{21}H_{20}O_4$ γ-Phenyl-γ-(6-tetralyl)itaconic acid, 587.
$C_{21}H_{20}O_{10}$ 6:6′-Methylenebis-4-hydroxy-3:5-dimethoxyphthalide, 727.
$C_{21}H_{20}N_4$ 4:4′-Diamidinotriphenylmethane, dihydrochloride of, 110.
$C_{21}H_{22}O_8$ Methyl dihydroelliptate, 592.
$C_{21}H_{24}O_8$ Methyl tetrahydroelliptate, 594.
$C_{21}H_{24}O_9$ Methyl tetrahydromalaccolate, 594.
$C_{21}H_{26}O_4$ *d*-5-Hydroxy-5′-methyl-7-*n*-amyl-3:4-*cyclo*hexenocoumarin acetate, 187.
$C_{21}H_{28}N_4$ 2-(δ-Diethylamino-α-methylbutylamino-5:6:2′:3′-pyridoquinoline, and its picrate, 218.
$C_{21}H_{30}O_2$ *d*-Tetrahydrocannabinol, 188.
$C_{21}H_{30}O_3$ Pyrethrin I, structure of, 671.
$C_{21}H_{32}O_2$ γ-Phenyl-α-methyl-α-*n*-decylbutyrolactones, 496.
$C_{21}H_{32}O_3$ 2-Phenacyl-2-methyl-lauric acid, 496.
$C_{21}H_{34}O_4$ 2:4:5-Trimethoxylaurophenone, 660.
$C_{21}H_{36}O_2$ 4-αα-Dimethylundecylveratrole, 493.

21 III

$C_{21}H_{12}ON_2$ *N*-Benzoyl-4:4′-dicyanodiphenylamine, 116.
N-4-Cyanophenylbenzimino-4′-cyanophenyl ether, 116.
$C_{21}H_{14}O_2S$ Desyl thiobenzoate, 93.
$C_{21}H_{18}O_6N_4$ 4-(4′-Methoxyphenoxy)acetophenone 2:4-dinitrophenylhydrazone, 351.
$C_{21}H_{19}ON_5$ 4:4′-Diamidino-*N*-benzoyldiphenylamine, 111, 116.
$C_{21}H_{19}O_2N$ *p*-Tolyl phenylimidocarbonate, 153.
$C_{21}H_{20}O_2S$ *p*-Tolyl-*p*-methoxybenzhydrylsulphone, 610.
$C_{21}H_{22}O_2N_2$ 4:4′-Dicyano-αη-diphenoxyheptane, 114.
$C_{21}H_{23}O_6N_3$ 4:7-Dimethyl-2-*iso*propyl-5-indanol 3:5-dinitrobenzoate, 561.
$C_{21}H_{25}O_2N$ 4-Ethyloct-4-en-1-yn-3-ol α-naphthylurethane, 735.
$C_{21}H_{24}O_2N_2$ *NN′*-Bis-(α-phenylbutyryl)carbamide, 223.
$C_{21}H_{25}O_2N$ 4:5-Di-*tert.*-butylnaphthal-*N*-methylimide, 564.

$C_{21}H_{27}O_2N_3$ *p*-*n*-Heptylphenyl methyl ketone *p*-nitrophenylhydrazone, 308.
$C_{21}H_{28}O_2N_4$ 4:4′-Diamidino-α*η*-diphenoxyheptane, and its hydrochloride, 110.
$C_{21}H_{29}ON_3$ 3-(2′:6′:6′-Trimethyl*cyclo*hexenyl)-1-methylcrotonaldehyde phenylsemicarbazone, 732.
$C_{21}H_{32}O_2N_2$ Propylhexylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 404.

21 IV

$C_{21}H_{11}O_4ClS_2$ 5′-Chloro-7′-methylbenzthioindigos, 412.
5-Chloro-7-methyl-5′:6′-benzthioindirubin, 413.
$C_{21}H_{13}O_2N_2Cl$ 6-Chloro-4-(4′-benzoyloxyphenyl)cinnoline, 357.
$C_{21}H_{16}ONBr$ α-Phenyl-α-(5-bromo-2-benzamidophenyl)ethylene, 355.
$C_{21}H_{17}O_4NS$ α-(*p*-Nitrotriphenylmethylthio)acetic acid, 92.
$C_{21}H_{18}O_2NBr$ Phenyl-(5-bromo-2-benzamidophenyl)methylcarbinol, 355.
$C_{21}H_{18}O_3N_2S$ 1-Acetamido-9-*p*-toluenesulphonylcarbazole, 510.
$C_{21}H_{20}ON_2I$ 2-(1:3-Dimethylquinoxaline)-2-(1-methylbenoxazole)trimethincyanine iodide, 713.
$C_{21}H_{22}N_3IS_2$ [2-(3-Ethylbenzthiazole)][3-(4-ethyl-2:4-benzthiazine)]-γ-azatrimethincyanine iodide, 102.
$C_{21}H_{25}O_4N_3S$ 2-(1:3-Dimethylquinoxaline)-1-(4-dimethylaminobenzene)dimethincyanine methosulphate, 712.

C_{22} Group.

$C_{22}H_{18}O_5$ *p*-Methoxybenzhydryl hydrogen phthalates, 607.
$C_{22}H_{20}O_7$ *O*-Acetyldehydrotetrahydroelliptone, 594.
$C_{22}H_{20}N_2$ 3:4:7:8:9:10-Hexahydronaphtha(1:2-5:6)-bis-(2:3)-indole, 693.
$C_{22}H_{22}O_8$ Ethyl elliptate, 592.
$C_{22}H_{24}O_6$ *iso*Derritol methyl ether, 597.
$C_{22}H_{24}O_8$ Ethyl dihydroelliptate, 592.
$C_{22}H_{26}N_4$ *trans*-Decalin-1:5-dione diphenylhydrazone, 693.
$C_{22}H_{30}O_5$ Pyrethrin II, structure of, 671.
$C_{22}H_{30}N_4$ 4:4′-Di-*N*-diethylamidinodiphenyl, dihydrochloride of, 110.
(δ-Diethylamino-α-methylbutylamino)methylpyridoquinolines, and their picrates, 217.
$C_{22}H_{36}O_2$ Palmitylbenzoquinone, 661.
$C_{22}H_{36}O_3$ 2:5-Diethoxylaurophenone, 660.
2:5-Dimethoxymyristophenone, 660.
1-2′:4′:5′-Trimethoxyphenyl-1-methyl-Δ^1-duodecene, 661.
$C_{22}H_{38}O_2$ 2:5-Diethoxylaurylbenzene, 660.
2:5-Dimethoxymyristylbenzene, 660.
Palmitylquinol, 660.
$C_{22}H_{42}O_2$ Brassidic acid, preparation of, 481.
Erucic acid, preparation and oxidation of, 477.
$C_{22}H_{42}O_3$ Methyl 5-keto-3-methyl-3-*n*-octyl-laurate, 495.
$C_{22}H_{42}O_4$ Hydroxyketobehenic acid, 481.

22 III

$C_{22}H_{14}O_3S_2$ Ethoxybenzthioindirubins, 412, 413.
$C_{22}H_{16}O_2N_2$ 1:4-Di-(4′-cyanobenzyloxy)benzene, 114.
ωω′-Di-(4′-cyanophenoxy)-*p*-xylene, 114.
$C_{22}H_{16}N_2Cl$ *NN*-Diphenyl-6-chloro-4-quinolylamidine, 431.
$C_{22}H_{15}ON_3$ 9′-Keto-3′(or 4′)-*tert.*-butyl-8′-azaphenalino(7′:8′:2:3)-ψ-indole, 564.
$C_{22}H_{18}O_2N_2$ 4:4′-Dimethoxy-1:1′-azonaphthalene, 47.
$C_{22}H_{18}O_3S$ α-(Benzoylbenzhydrylthio)acetic acid, 94.
$C_{22}H_{19}O_2N$ Ethyl β-3-pyrenylaminocrotonate, 377.
$C_{22}H_{20}O_2N_2$ 4-*tert.*-Butylnaphthalphenylhydrazide, 564.
$C_{22}H_{21}O_2N$ *p*-Tolyl *o*-tolylimidocarbonate, 153.
$C_{22}H_{22}O_2N_4$ 1:4-Di-(4′-amidinobenzyloxy)benzene, dihydrochloride of, 111.
ωω′-Di-(4′-amidinophenoxy)xylene, dihydrochloride of, 110.
$C_{22}H_{22}O_8N_8$ 2:2′-Diketodi*cyclo*pentyl bis-2:4-dinitrophenylhydrazone, 692.
$C_{22}H_{24}O_4N_4$ 1-Keto-3-*cyclo*hexenyl-Δ^2-octahydrophenanthrene 2:4-dinitrophenylhydrazone, 395.
$C_{22}H_{28}O_5N_4$ 12-Acetyl-9-ketotetradecahydrophenanthrene 2:4-dinitrophenylhydrazones, 394.
$C_{22}H_{30}O_3N_2$ *p*-*n*-Octylphenyl methyl ketone *p*-nitrophenylhydrazone, 308.
$C_{22}H_{34}O_2N_2$ Butylhexylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 404.
Methylnonylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 404.

22 IV

$C_{22}H_{14}ON_2S_2$ Bis-(α-naphthylthiocarbimide) oxide, 375.
$C_{22}H_{23}N_2IS_2$ [2-(3-Ethylbenzthiazole)][3-(4-ethyl-2:4-benzthiazine)]trimethincyanine iodide, 102.

C_{23} Group.

$C_{23}H_{20}O_4$ Dimethyl γ-phenyl-γ-naphthylitaconate, 587.
$C_{23}H_{22}O_6$ Derritol *iso*flavones, 597.
$C_{23}H_{24}O_6$ Dihydroderritol *iso*flavone, 597.
$C_{23}H_{24}O_{10}$ 6:6′-Methylenebis-3:4:5-trimethoxyphthalide, 726.
$C_{23}H_{26}O_5$ *l*-Dihydrodeoxy*iso*rotenone, 593.
$C_{23}H_{38}O_2$ 1-2′:5′-Dimethoxyphenyl-1-methyl-Δ^1-tetradecene, 661.
5-Hydroxy-3-methyl-2-tetradecylcoumaran, 661.
5-Methoxy-2-tetradecylcoumarin, 661.

$C_{23}H_{38}O_3$ 4-Methoxyphenyl palmitate, 660.
$C_{23}H_{44}O_2$ Ethyl 2-methyl-2-(β-*cyclo*hexylethyl)laurate, 496.
$C_{23}H_{44}O_3$ Methyl oxidobrassidate, 482.
Methyl oxidoerucate, 482.
$C_{23}H_{45}N$ 2-Methyl-2-*n*-decyl-lauronitrile, 493.
$C_{23}H_{46}O_4$ Methyl 13:14-dihydroxybehenate, 482.

23 III

$C_{23}H_{20}O_3S$ β-(Benzoylbenzhydrylthio)propionic acid, 94.
$C_{23}H_{23}N_4I$ Bis-2-(1:3-dimethylquinoxaline)trimethincyanine iodide, 713.
$C_{23}H_{45}O_4N_3$ Hydroxyketobehenic acid semicarbazone, 481.

23 IV

$C_{23}H_{29}O_4N_3S$ 2-(3-Methyl-1-ethylquinoxaline)-1-(4-dimethylaminobenzene)dimethincyanine ethosulphate, 712.

C_{24} Group.

$C_{24}H_{12}O_2$ 1″-Ketoindeno-2″:3″:2′:1′-benzanthrone, 628.
$C_{24}H_{14}O$ Indeno-2″:3″:2′:1′-benzanthrone, 626.
$C_{24}H_{14}O_3$ 1′-Phenylbenzanthrone-2′-carboxylic acid, 628.
$C_{24}H_{16}O$ Dihydroindeno-2″:3″:2′:1′-benzanthrone, 627.
$C_{24}H_{22}O_3$ β-Hydroxy-β-methyltrimethylene-αγ-bis-2-naphthyl ether, 171.
$C_{24}H_{22}O_9$ *O*-Diacetyldehydrotetrahydromalaccol, 595.
$C_{24}H_{24}O_9$ Ethyl acetylelliptate, 592.
$C_{24}H_{40}O_2$ 1-2′:5′-Dimethoxyphenyl-Δ^1-hexadecene, 661.
Stearylbenzoquinone, 661.
$C_{24}H_{40}O_3$ 2:5-Diethoxymyristophenone, 660.
2:5-Dimethoxypalmitophenone, 660.
$C_{24}H_{42}O_2$ 2:5-Diethoxymyristylbenzene, 660.
2:5-Dimethoxypalmitylbenzene, 660.
Stearylquinol, 660.
$C_{24}H_{42}O_3$ 1-Hydroxy-1-2′:5′-dimethoxyphenylhexadecane, 661.

24 III

$C_{24}H_{12}O_2S_2$ Dibenzthioindigos, 413.
Dibenzthioindirubins, 413.
$C_{24}H_{18}O_2S$ 3′-*tert.*-Butyl-1:7′-thionaphthenacenaphthenylindigo, 564.
$C_{24}H_{20}N_2S_2$ Trimethin[2-(3-ethyldihydro-4:5-benzbenzthiazole)][3-(2:4-benzthiazine)], 102.
$C_{24}H_{23}N_2I$ 2-(1-Phenylquinoxaline)-1-(4-dimethylaminobenzene)dimethincyanine iodide, 713.
$C_{24}H_{25}N_2I$ 2-(1:3-Dimethylquinoxaline)-2-(1:3:3-trimethylindoline)trimethincyanine iodide, 712.
$C_{24}H_{22}O_2N_2$ 4:4′-Dicyano-ακ-diphenoxydecane, 114.

24 IV

$C_{24}H_{20}ON_2S$ Trimethin[2-(3-ethyldihydro-6:7-benzbenzoxazole)][3-(2:4-benzthiazine)], 101.
$C_{24}H_{24}O_3N_2S$ 2-[*p*-(2′-1′:2′:3′:4′-Tetrahydro*iso*quinolyl)benzenesulphonyl]-1:2:3:4-tetrahydro*iso*quinoline, 739.
$C_{24}H_{36}O_3N_2S$ Sulphanilylchaulmoogramide, 241.
$C_{24}H_{40}O_3N_2S$ N^1-Dihydrochaulmoogrylsulphanilamide, 243.
Dihydrosulphanilylchaulmoogramide, 241.

C_{25} Group.

$C_{25}H_{42}O_2$ 1-2′:5′-Dimethoxyphenyl-1-methyl-Δ^1-hexadecene, 661.
5-Hydroxy-3-methyl-2-hexadecylcoumaran, 661.
$C_{25}H_{42}O_3$ 4-Methoxyphenyl stearate, 660.
$C_{25}H_{45}N$ Benzyldinonylamine, 403.

25 III

$C_{25}H_{22}IAs$ Triphenyl-*p*-tolylarsonium iodide, 669.
$C_{25}H_{24}N_3Cl$ 2-(1-Phenyl-3-methylquinoxaline)-1-(4-dimethylaminobenzene)dimethincyanine chloride, 713.

25 IV

$C_{25}H_{17}O_4ClS_2$ 6′-Chloro-4′-methylbenzthioindigos, 412.
$C_{25}H_{20}NSP$ Tetraphenylphosphorium thiocyanate, 670.
$C_{25}H_{20}NSAs$ Tetraphenylarsonium thiocyanate, 669.

C_{26} Group.

$C_{26}H_{16}O_2$ Dixanthylen, reaction of, with sulphur, 272.
$C_{26}H_{16}S_2$ Dithioxanthylen, 274.
$C_{26}H_{18}O_3$ Ethyl 1′-phenylbenzanthrone-2′-carboxylate, 628.
$C_{26}H_{22}N_4$ 4:4′-Di-*N*-phenylamidinodiphenyl, dihydrochloride of, 110.
$C_{26}H_{44}O_3$ 2:5-Dimethoxystearophenone, 660.

$C_{26}H_{46}O_2$ 2:5-Diethoxypalmitylbenzene, 660.
2:5-Dimethoxystearylbenzene, 660.
$C_{26}H_{48}O_2$ 5-Methyl-2-*n*-nonyl-5-*n*-decyl*cyclo*hexane-1:3-dione, 496.

26 III

$C_{26}H_{16}O_4Cl_2$ 2-Keto-5-styryl-2:3-dihydrofuran, di-*o*-chlorobenzoyl derivative, 35.
$C_{24}H_{20}OS$ Phenyl α-benzoylbenzhydryl sulphide, 95.
$C_{26}H_{24}IAs$ Diphenyldi-*p*-tolylarsonium iodide, 669.
$C_{26}H_{26}ON_2$ 9′-Keto-3′:4′-di-*tert.*-butyl-8′-azaphenalino(7′:8′:2:3)-ψ-indole, 564.
$C_{26}H_{26}O_5N_4$ 3:4-Di-*tert.*-butylacenaphthenequinone 2:4-dinitrophenylhydrazone, 565.
$C_{26}H_{27}O_3N_3$ 3:4-Di-*tert.*-butylacenaphthenequinone *p*-nitrophenylhydrazone, 565.
$C_{26}H_{28}O_2N_2$ 4:5-Di-*tert.*-butylnaphthalphenylhydrazide, 564.
$C_{26}H_{32}O_2N_2$ 2:7-Dihydroxy-1:8-bispiperidinomethylphenanthrene, 684.
$C_{26}H_{49}ON$ 2-Keto-1:3-dimethyl-3:5-di-*n*-decyl-2:3-dihydropyrrole, 495.

26 IV

$C_{26}H_{18}O_6N_4S$ 4:4′-Bis-(*p*-nitrobenzamido)diphenylsulphone, 242.
Diphenylsulphone-4:4′-bisazosalicylic acid, 244.
$C_{26}H_{20}O_2N_2S$ 1-Benzamido-9-*p*-toluenesulphonylcarbazole, 510.
$C_{26}H_{22}O_4N_2S_2$ 1-*p*-Toluenesulphonamido-9-*p*-toluenesulphonylcarbazole, 510.
$C_{26}H_{22}NSAs$ Triphenyl-*p*-tolylarsonium thiocyanate, 669.

C_{27} Group.

$C_{27}H_{24}O_8$ Robustic acid, and its salts, 182.
$C_{27}H_{26}O_8$ Dihydrorobustic acid, 182.
$C_{27}H_{46}O_2$ 1-2′:5′-Dimethoxyphenyl-1-methyl-Δ^1-octadecene, 661.

27 III

$C_{27}H_{20}O_2S$ α-Benzoylbenzhydryl thiobenzoate, 94.
$C_{27}H_{26}IAs$ Phenyltri-*p*-tolylarsonium iodide, 669.
$C_{27}H_{41}ON$ Solasodiene, 10.
$C_{27}H_{42}O_3N$ Solasodine nitrite, 9.
$C_{27}H_{43}O_2N$ Solasodine, 8.
Solauricidine, and its salts, 14.
$C_{27}H_{45}O_2N$ Dihydrosolasodine, 9.
$C_{27}H_{47}ON$ Hexahydrosolasodiene, 10.

27 IV

$C_{27}H_{18}O_4NCl$ 5-Chloro-2-benzamido-4′-benzoyloxybenzophenone, 355.

C_{28} Group.

$C_{28}H_{18}O_4$ 2:7-Dibenzoyloxyphenanthrene, 686.
$C_{28}H_{20}O_4$ 2:7-Dibenzoyloxy-9:10-dihydrophenanthrene, 687.
$C_{28}H_{26}O_8$ Methyl robustate, 182.
$C_{28}H_{26}N_6$ αβ-Bis-(4-phenylbenzamidrazino)ethylene, and its dihydrochloride, 111.
$C_{28}H_{28}O_8$ Methyl dihydrorobustate, 182.
$C_{28}H_{34}O_3$ Ethyl 5-keto-3-methyl-3-*n*-decylpentadecoate, 496.
$C_{28}H_{34}O_4$ *p*-Phenylphenacyl β-(2-acetyl-4-*iso*propyl*cyclo*pentyl)butyrate, 562.
$C_{28}H_{48}O$ ωω-Di-*n*-decylacetophenone, 493.
$C_{28}H_{50}O_2$ 2:5-Diethoxystearylbenzene, 660.

28 III

$C_{28}H_{22}O_2S$ Didesyl sulphide, 93.
$C_{28}H_{24}O_2S$ 3′:4′-Di-*tert.*-butyl-1:7′-thionaphthenacenaphthenylindigo, 565.
$C_{28}H_{26}N_2I$ 2-(1-Phenylquinoxaline)-2-(1:3:3-trimethylindoline)trimethincyanine iodide, 713.
$C_{28}H_{28}IP$ Tetratolylphosphonium iodides, 670.
$C_{28}H_{40}O_6N_4$ 2:5-Diethoxylaurophenone 2:4-dinitrophenylhydrazone, 660.

28 IV

$C_{28}H_{16}O_6N_2S$ 4:4′-Bisphthalimidodiphenylsulphone, 44.
$C_{28}H_{20}O_3NCl$ α-(5-Chloro-2-benzamidophenyl)-α-(4′-benzoyloxyphenyl)ethylene, 356.
$C_{28}H_{20}O_4NCl$ 5-Chloro-2-benzamido-2′-benzoyloxy-5′-methylbenzophenone, 357.
$C_{28}H_{20}O_8N_2S$ 4:4′-Bis-*o*-carboxybenzamidodiphenylsulphone, 45.
$C_{28}H_{26}NSAs$ Phenyltri-*p*-tolylarsonium thiocyanate, 669.
$C_{28}H_{36}O_8N_2S$ 4:4′-Bis-δ-carbethoxyvaleramidodiphenylsulphone, 44.

C_{29} Group.

$C_{29}H_{40}O_3$ Triketone, from oleanolic acid, 743.
$C_{29}H_{42}O_3$ Diketo-dehydro-acid, from deoxoglycyrrhetic acid, 743.
$C_{29}H_{44}O$ Oleadienone II, 539.
$C_{29}H_{44}O_2$ Norsiaresinodione, 543.

$C_{29}H_{46}O$ Fucostadienone, 392.
Norechinocystadienol, 539.
Norsiaresinone, 543.
Oleadienols, 539.
$C_{29}H_{48}O$ Dihydronorsiaresinol, 544.

26 III

$C_{29}H_{42}ON_2$ Pyridazine derivative from oleanolic acid, 743.
$C_{29}H_{45}O_2N$ Acetylsolasodine, 8.
$C_{29}H_{47}ON$ Fucostadienone oxime, 393.
Stigmastadienone oxime, 393.

C_{30} Group.

$C_{30}H_{22}$ 1:2:4:5-Tetraphenylbenzene, preparation of, 585.

30 II

$C_{30}H_{20}O_2$ Diflavylen, reaction of, with sulphur, 272.
$C_{30}H_{20}S_2$ Dithioflavylen, 273.
$C_{30}H_{24}Cl_2$ $a\zeta$-Dichloro-$a\gamma\delta\zeta$-tetraphenyl-Δ^{ae}-hexadiene, 585.
$C_{30}H_{32}O_6$ Cannabinol *p*-carboxymethoxybenzoate, 630.
$C_{30}H_{46}O_2$ Breienedione, 201.
Maniladione, 203.
$C_{30}H_{46}O_3$ Dehydrodeoxoglycyrrhetic acid, 539.
Dehydro-oleanolic acid, 539.
$C_{30}H_{46}O_4$ Glycyrrhetic acid, structure of, 535.
$C_{30}H_{48}O_2$ Breieneonols, 202.
Deoxydeoxoglycyrrhetic acid, 538.
Elemanic acids, 549, 550.
$C_{30}H_{48}O_3$ Breienediolone, 202.
Dihydro-β-elemonic acid, 550.
Oleanolic acid, structure of, 741.
$C_{30}H_{48}O_4$ Siaresinolic acid, 540.
$C_{30}H_{48}O_6$ 2:4:5-Triacetoxystearylbenzene, 661.
$C_{30}H_{50}O_2$ Dihydro-α-elemanic acid, 549.
Dihydro-β-elemanic acid, 550.
$C_{30}H_{54}O_2$ Dihydroxydihydrosqualene, 121.

30 III

$C_{30}H_{30}O_3S$ 5-Ethoxy-3′:4′-di-*tert.*-butyl-1:7′-thionaphthenacenaphthenylindigo, 565.
$C_{30}H_{44}O_6N_4$ 2:5-Diethoxymyristophenol 2:4-dinitrophenylhydrazone, 660.
$C_{30}H_{47}O_2N$ Maniladione oxime, 203.
$C_{30}H_{49}ON_3$ Fucostadienone semicarbazone, 393.
$C_{30}H_{49}O_3N$ Dihydro-α-elemonic acid oxime, 549.

30 IV

$C_{30}H_{22}O_7N_2As$ Tetraphenylarsonium picrate, 669.
$C_{30}H_{40}O_8N_2S$ 4:4′-Bis-η-carboxyoctamidodiphenylsulphone, 44.

C_{31} Group.

$C_{31}H_{25}N_3$ Pentaphenylguanidine, and its hydrochloride, 152.
$C_{31}H_{46}O_4$ Methyl α- and β-siaresinonates, 543.
$C_{31}H_{48}O_2$ Norechinocystadienol acetate, 539.
$C_{31}H_{48}O_3$ Methyl dehydrodeoxoglycyrrhetate, 539.
Methyl β-deoxosiaresinonate, 543.
$C_{31}H_{50}O_2$ Methyl β-boswellanate, 41.
Methyl deoxydeoxoglycyrrhetate, 538.
Methyl elemanates, 549.
$C_{31}H_{50}O_3$ Methyl dihydro-α-elemonate, 549.
Methyl dihydro-β-elemonate, 550.
Methyl 21-ketodihydro-oleananate, 543.
$C_{31}H_{52}O$ Amyrin methyl ethers, 202.
$C_{31}H_{52}O_2$ Methyl dihydrobetulanate, 41.
Methyl dihydro-β-elemanate, 550.

31 III

$C_{31}H_{31}O_2N_3$ 2-(1-Phenyl-3-methylquinoxaline)-2-(1:3:3-trimethylindoline)trimethincyanine acetate, 713.

C_{32} Group.

$C_{32}H_{27}N_3$ *s*-Tetraphenyltolylguanidines, 152.
$C_{32}H_{34}N_4$ 3:4-Di-*tert.*-butylacenaphthenequinone diphenylhydrazone, 564.
$C_{32}H_{50}O_3$ Breieneonol acetates, 202.

32 III

$C_{32}H_{30}O_6N_8$ 3:4-Di-*tert.*-butylacenaphthenequinone bis-2:4-dinitrophenylhydrazone, 565.
$C_{32}H_{48}O_6N_4$ 2:5-Diethoxypalmitophenone 2:4-dinitrophenylhydrazone, 660.

32 IV

$C_{32}H_{22}O_4N_4S$ Diphenylsulphone-4:4′-bisazo-β-naphthol, 243.
$C_{32}H_{36}O_6N_2S$ 4:4′-Biscamphorimidodiphenylsulphone, 45.
$C_{32}H_{44}O_8N_2S$ 4:4′-Bis-η-carbomethoxyoctamidodiphenylsulphone, 44.

C_{33} Group.

$C_{33}H_{46}O_3$ Diketo-dehydro-ester, from deoxoglycyrrhetic acid, 743.
Diketo-dehydro-ester, from oleanolic acid, 743.
$C_{33}H_{50}O_4$ Methyl acetyldehydrodeoxoglycyrrhetate, 539.
dl-Tetrahydrocannabinol *l*-menthoxyacetate, 188.
$C_{33}H_{50}O_5$ Methyl acetyl-21-keto-oleanolate, 543.
$C_{33}H_{52}O_5$ Methyl acetylsiaresinolate, 543.
$C_{33}H_{54}O_4$ Methyl acetyldihydro-α-elemolate, 549.

33 III

$C_{33}H_{27}N_4Cl$ Bis-2-(1-phenyl-3-methylquinoxaline)trimethincyanine chloride, 713.
$C_{33}H_{48}O_5Br_2$ Methyl dibromoacetylglycyrrhetate, 744.

33 IV

$C_{33}H_{40}O_8N_4S_4$ Tetrakisbenzenesulphonmethylamidomethylmethane, 168.

C_{34} Group.

$C_{34}H_{24}S_2$ αα′α″α‴-Tetraphenyl-γγ′-dithiopyrylen, 274.
$C_{34}H_{52}O_5$ Brienediolone diacetate, 202.

34 III

$C_{34}H_{22}Cl_2S_2$ ββ′-Dichloro-αα′α″α‴-tetraphenyl-γγ′-dithiopyrylen, 274.

C_{35} Group.

$C_{35}H_{28}O_2N_4$ Bis-2-(1-phenyl-3-methylquinoxaline)trimethincyanine acetate, 713.
$C_{35}H_{50}O_4N_4$ Fucostadienone 2:4-dinitrophenylhydrazone, 393.
Stigmastadienone 2:4-dinitrophenylhydrazone, 393.
$C_{35}H_{54}O_4N_4$ Sitostenone 2:4-dinitrophenylhydrazone, 393.

C_{36} Group.

$C_{36}H_{30}O_2N_4$ Dibenzoyltetraphenyltetrazan, equilibrium of, with β-benzoyl-αα-diphenylhydrazyl, 121.

C_{37} Group.

$C_{37}H_{58}O_3S$ β-Amyrin *p*-toluenesulphonate, 202.

C_{39} Group.

$C_{39}H_{42}O_{10}$ Cannabidiol bis-*p*-carbomethoxybenzoate, 630.

C_{40} Group.

$C_{40}H_{30}O_2S_2$ Di-α-benzoylbenzhydryl disulphide, 94.

C_{42} Group.

$C_{42}H_{42}OBr_2As_2$ Tri-*o*-tolylarsine oxydibromide, 670.
$C_{42}H_{43}O_2BrAs_2$ Tri-*o*-tolylarsine hydroxy-oxybromide, 670.
$C_{42}H_{43}O_2IAs_2$ Tri-*o*-tolylarsine hydroxy-oxyiodide, 670.

C_{44} Group.

$C_{44}H_{26}O_{26}N_{10}I_4S_6$ 5:5′-Di-iodo-2:2′-disulphodiphenyl-4:4′-bis-[2″-azo-8″-amino-1″-hydroxy-3″:6″-disulphonaphthalene-7″-(azo-2‴-di-iodobenzene-4‴-sulphonic acid)], octasodium salt, 716.

C_{45} Group.

$C_{45}H_{72}O_6$ Glycyrrhetic acid, structure of, 741.

45 III

$C_{45}H_{73}O_{16}N$ Solasonine, 2, 3.
Solauricine, 14, 17.

45 VI

$C_{45}H_{34}O_{20}N_{10}I_2S_4As_2$ 3:3′-Di-iododiphenylmethane-4:4′-bis-(2″-azo-7″-amino-1″-hydroxy-3″:6″-disulphonaphthalene-8″-azobenzene-4‴-arsonic acid), octapotassium salt, 715.

C_{46} Group.

$C_{46}H_{21}O_{24}N_{10}I_6S_6$ 5:5′-Di-iodo-2:2′-disulphodiphenyl-4:4′-bis-[2″-azo-8″-amino-1″-hydroxy-3″:6″-disulphonaphthalene-7″-(azo-2‴:4‴-di-iodobenzene-6‴-carboxylic acid)], trisodium salt, 716.

46 VI

$C_{46}H_{24}O_{20}N_{10}I_4S_4As$ 3:3′-Dimethyldiphenyl-4:4′-bis 2″-azo-8″-amino-1″-hydroxy-3″:6″-disulphonaphthalene-7″-(azo-2‴:6‴-di-iodobenzene-4‴-arsonic acid)], octasodium salt, 715.

C_{48} Group.

$C_{48}H_{38}O_{14}N_{10}I_2S_4$ 3:3′-Dimethyldiphenyl-4:4′-bis-[2″-azo-8″-amino-1″-hydroxy-3″:6″-disulphonaphthalene 7″-(5‴-iodo-*o*-azotoluene)], tetrasodium salt, 715.

C_{80} Group.

$C_{80}H_{132}O_2$ Caoutchol, 223.

ERRATA.

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Page	Line	
193	12 *	*for* "$k_1t = \frac{2{\cdot}303}{-\Delta}\log\frac{(x-a)}{a(x-\Delta)}$" *read* "$k_1t = \frac{2{\cdot}303}{a-\Delta}\log\frac{\Delta(x-a)}{a(x-\Delta)}$"
363	3 *	*for* "225°" *read* "22·5°."
364		*for the entry under* "β-Iodopentane" *substitute the following:*

0·00000	2·2350	1·5940	28·14	128	28·1
0·00664	2·2722	1·5932	28·81	127	28·2
0·01147	2·2991	1·5928	29·28	126	28·2
0·02051	2·3489	1·5916	30·15	124	28·2
0·03930	2·4534	1·5893	31·95	122	28·3
0·08770	2·7227	1·5838	36·32	115	29
0·18527	3·276	1·5730	44·44	105	31
0·41776	4·568	1·5502	60·38	93	36
1·00000	7·249	1·5020	89·09	89·1	46

518	19*	*for* "$\log_m\xi$" *read* "$\log \epsilon_m$."
579	10	*for* "carbon atom 2" *read* "carbon atom 3."
585	6—8	*substitute the following:* Nitric acid, *d* 1·42, expelled two methyl groups from 3 : 3′ : 5 : 5′-tetranitrotetramethylbenzidine; the 3 : 3′ : 5 : 5′-tetranitrodimethylbenzidine formed crystallised rapidly from hot nitrobenzene in deep yellow pyramids, m. p. 215° (decomp.) (Mertens, *Ber.*, 1886, **19**, 2125, gives red needles from phenol which decompose above 200°) (Found: N, 21·6. Calc.: N, 21·4%). Nitric acid, *d* 1·5, however, gave rise to *N* : *N*′ : 3 : 3′ : 5 : 5′-hexanitrodimethylbenzidine, which crystallised rapidly from hot nitrobenzene in bright yellow, lenticular or rhomboidal plates, m. p. 227° (decomp.), which explode in the flame (Mertens, *loc. cit.*, and Van Romburgh, *Rec. Trav. chim.*, 1886, **5**, 240, describe the compound as exploding above 220°).

* From bottom.

SYMBOLS FOR THERMODYNAMICAL AND PHYSICO-CHEMICAL QUANTITIES AND CONVENTIONS RELATING TO THEIR USE, ADOPTED AS RECOMMENDED PRACTICE BY THE CHEMICAL SOCIETY.

(Where two or more symbols separated by commas or semicolons are given for a quantity, these symbols are to be regarded as alternatives for which no preference is expressed. On the other hand, where two symbols are separated by a dotted line, the former is the first preference.)

1. To be Printed in Black Italic.

(Certain important physical constants.)

F Faraday's constant.
J Mechanical equivalent of heat.
N Avogadro's number.
R { Gas constant per mol. / Rydberg's constant.
c Velocity of light in vacuo.
e Electronic charge (charge equal and opposite in sign to that of an electron).
g Acceleration due to gravity (standard value, if variation from standard is significant).
h Planck's constant.
k Boltzmann's constant.
m Rest mass of an electron.

2. To be Printed in Ordinary Italic, when not Greek.

General Physics and Chemistry.

Length	l
mean free path of molecules	l
height	h
diameter, distance	d
diameter of molecules	σ
radius	r
Mass	m
molecular weight	M
atomic weight	A
atomic number	Z
gram-equivalent weight	Z, J
Time	t
time interval, especially half- or mean-life	τ
frequency	ν
Velocity	v; c, (u, v, w)
of ions	u (with subscript)
angular	ω
Acceleration	$f \ldots a$
due to gravity (as variable)	g
Force	F, (X, Y, Z)
Moment of inertia	I
Pressure	p, P
especially osmotic	Π
Volume	v, V
Density	$\rho \ldots d$
Compressibility	$\kappa \ldots K$

Viscosity	η
Fluidity	ϕ
Surface area	$A \ldots s$
Angle of contact	θ
Surface tension	$\gamma \ldots \sigma$
Parachor	$[P]$
Surface concentration excess	Γ
Number of mols	n
Concentration, mol fraction	N, x
in other terms	c, C
Solubility	s
Diffusion coefficient	D
Chemical equilibrium constant (products/reactants)	K
solubility product	$K_s \ldots L$
Velocity constant of chemical reaction	k
Number of molecular collisions per second	Z
Partition function	f
Efficiency, of any process	η
Wave function	ψ

Heat and Thermodynamics.

Temperature, on absolute scale, (°K)	T
on other scales	$\theta \ldots t$
Thermal conductivity	k
Energy (general symbol)	E
Work done by or on a system	$w \ldots W$
Heat entering a system	q
Specific heat	c_p and c_v
molecular heat	C_p and C_v
Ratio of specific heats	γ
Latent heat, per g.	l
per mol	L
Intrinsic energy	$U \ldots E$
Enthalpy, total heat, or heat content	H
Entropy	S
Free energy (Helmholtz)	$A \ldots F$
Thermodynamic potential, Gibbs function, free energy (G. N. Lewis)	G
Vapour pressure constant	i
Chemical potential	μ
Activity	a
coefficient (for molar concentration)	f
Osmotic coefficient	g
Van 't Hoff's factor	i

Electricity.

Quantity of electricity	Q
especially electrostatic charge	e
Potential (difference)	V
Volta potential	V
electrokinetic potential	ζ
especially electromotive force of voltaic cells	E
Potential gradient, in electric field	X
Electronic exit work function	ϕ

Current	I
Resistance	R
specific resistance	$\rho \ldots r$
specific conductance	$\kappa \ldots \sigma$
Inductance, self	L
mutual	M
Electrostatic capacity	C
Dielectric constant	ϵ
Dipole moment	μ

Electrochemistry.

Degree of electrolytic dissociation	α
Valency of an ion	z
Ionic strength	I
Equivalent conductance	Λ
equivalent ionic conductance, "mobility"	l (with subscript)
Transport number	T (with subscript) . . . n (with subscript)
Single electrode potential	e (with subscript), E (with subscript)
Electrolytic polarisation, overvoltage	$\eta \ldots \pi$

Magnetism.

Magnetic field strength	H
flux	ϕ
permeability	μ
susceptibility—volume	κ
mass	χ
moment	M
induction	B

Optics.

Wave length	λ
Wave number	ν
Intensity of light	I
Refractive index	n (with subscript) . . . μ (with subscript)
specific refraction	r (with subscript)
molecular refraction	$[R]$ (with subscript)
Molar extinction coefficient	ϵ
Angle of (optical) rotation	α
specific rotation	$[\alpha]$
Specific magnetic rotation	ω

3. To be Printed in Roman, when not Greek.

(a) *Examples of Mathematical Constants and Operators.*

Base of natural logarithms	e
Ratio of circumference to diameter	π
Differential	d
partial	∂
Increment	Δ
very small increment	δ
Sum	Σ
Product	Π
Function	f, ϕ

(b) *Examples of single-letter abbreviations.*

*Ampère (in sub-units)	a.
Volt	v.
Ohm	Ω.
Watt	w.
Farad	f.
Henry	h.
Centigrade	c.
Fahrenheit	f.
Kelvin	k.
Ångstrom unit	a.
micron	μ.
metre	m.
gram	g.
litre	l.
Röntgen unit	r.
†Normal (concentration)	n.
†Molar (concentration)	m.

The following prefixes to abbreviations for the names of units should be used to indicate the specified multiples or sub-multiples of these units:

M	mega-	$10^{6}\times$
k	kilo-	$10^{3}\times$
d	deci-	$10^{-1}\times$
c	centi-	$10^{-2}\times$
m	milli-	$10^{-3}\times$
μ	micro-	$10^{-6}\times$

e.g., MΩ. denotes megohm; kw., kilowatt; and μg., microgram. The use of μμ. instead of mμ. to denote 10^{-7} cm., or of γ to denote microgram is deprecated.

4. Subscripts and other Modifying Signs.

(a) *Subscripts to symbols for quantities.*

I, II . . .	*especially with symbols for thermodynamic functions*, referring to different systems or different states of a system.
1, 2 . . .	
A B .	referring to molecular species A, B, etc.
i	referring to a typical ionic species i.
u	referring to an undissociated molecule.
+, −	referring to a positive or negative ion, or to a positive or negative electrode.
p, v, T	indicating constant pressure, volume, and temperature respectively.
q	indicating adiabatic conditions.
w	indicating that no work is performed.
p, c, a	*with symbol for an equilibrium constant*, indicating that it is expressed in terms of pressure, concentration, or activity.
G, V, L, X	referring to gas, vapour, liquid, and crystalline states, respectively.
f, e, s, t, d	referring to fusion, evaporation (vaporisation of liquid), sublimation, transition, and dissolution or dilution respectively.
c	referring to the critical state or indicating a critical value.
0	referring to a standard state, or indicating limiting value at infinite dilution.

* *E.g.* " ma." for " milliampère "; but " amp." is preferred for " ampère."

† Separated by a hyphen (and no full stop) from a chemical formula which follows it.

C, D, F *with symbols for optical properties*, referring to a particular wavelength.

Where a subscript has to be added to a symbol which already carries a subscript, the two subscripts may be separated by a comma or the symbol with the first subscript may be enclosed in parentheses with the second subscript outside.

(b) *Other modifying signs.*

° *as right-hand superscript to symbol (particularly to a symbol for a general thermodynamic function—see p. 5)*, referring to a standard state.

[ ] *enclosing formula of chemical substance*, indicating its molar concentration.

{ } *enclosing formula of chemical substance*, indicating its molar activity.

In crystallography it is recommended that:

Millerian indices be enclosed in parentheses, ( );
Laue indices be unenclosed;
Indices of a plane family be enclosed in braces, { };
Indices of a zone axis or line be enclosed in brackets, [ ].

Numerals attached to a symbol for a chemical element in various positions have the following meanings:

upper left	mass number of atom.
lower left	nuclear charge of atom.
lower right	number of atoms in molecule.

e.g., ${}^{7}_{3}\mathrm{Li}$; ${}^{2}_{1}\mathrm{H}_{2}$ (= D_{2}).

ALPHABETICAL INDEX OF RECOMMENDED SYMBOLS, and single-letter abbreviations.

including all those given in the above lists except prefixes, subscripts and other modifying signs.

The name of any quantity for which a given symbol is a second preference is printed in parentheses.

A free energy—Helmholtz; atomic weight; surface area.
A. Ångstrom unit.
a activity; (acceleration).
a. ampère, in sub-units—see footnote, p. 2093.
B magnetic induction.
C concentration; electrostatic capacity.
with subscript: molecular heat capacity.
c. Centigrade.
c velocity of light in vacuo.
c velocity; concentration.
with subscript: specific heat.
D diffusion coefficient.
d diameter; distance; (density).
d differential.
∂ partial differential.
E energy; (intrinsic energy); potential difference, especially electromotive force of voltaic cells.
with subscript: single electrode potential.
e electronic charge—charge equal and opposite in sign to that of an electron.
e quantity of electricity, especially electrostatic charge.
with subscript: single electrode potential.

e base of natural logarithms.
F Faraday's constant.
F force; (free energy—Helmholtz).
F. farad; Fahrenheit.
f acceleration; activity coefficient, for molar concentration; partition function.
f function.
G thermodynamic potential, Gibbs function, free energy—G. N. Lewis.
g acceleration due to gravity, standard value.
g acceleration due to gravity, as a variable; osmotic coefficient.
g. gram.
H enthalpy, total heat, heat content; magnetic field strength.
H. henry.
h Planck's constant.
h height.
I moment of inertia; ionic strength; electric current; intensity of light.
i vapour pressure constant; van 't Hoff's factor.
J mechanical equivalent of heat.
J gram-equivalent weight.
K chemical equilibrium constant; (compressibility).
K_s solubility product.
K. Kelvin.
k Boltzmann's constant.
k thermal conductivity; velocity constant of chemical reaction.
L latent heat per mol; self inductance; (solubility product).
l latent heat per g.; length; mean free path of molecules.
with subscript: equivalent ionic conductance, " mobility ".
l. litre.
M molecular weight; mutual inductance; magnetic moment.
M. molar concentration.
m rest mass of an electron.
m mass.
m. metre.
N Avogadro's number.
N mol fraction.
N. normal concentration.
n number of mols.
with subscript: (transport number).
with subscript: refractive index.
P pressure.
[*P*] parachor.
p pressure.
Q quantity of electricity.
q heat entering a system.
R gas constant per mol; Rydberg's constant.
R electrical resistance.
[*R*] *with subscript:* molecular refraction.
r radius; (specific resistance).
with subscript: specific refraction.
r. Röntgen unit.
S entropy.
s solubility; (surface area).
T temperature, on absolute Kelvin scale.
with subscript: transport number.
t time; (temperature—not on absolute scale).
U intrinsic energy.
u velocity component.
with subscript: velocity of ions.
V volume; potential, potential difference, including Volta potential.

v. volt.
v volume; velocity; velocity component.
W (work done by or on a system).
w. watt.
w work done by or on a system; velocity component.
X force component; potential gradient in electric field.
x mol fraction.
Y force component.
Z force component; g.-equivalent weight; number of molecular collisions per second; atomic number.
z valency of an ion.

α degree of electrolytic dissociation; angle of optical rotation.
$[\alpha]$ specific optical rotation.
Γ surface concentration excess.
γ ratio of specific heats; surface tension.
Δ increment.
δ very small increment.
ϵ dielectric constant; molar extinction coefficient.
ζ electrokinetic potential.
η efficiency of any process; viscosity; electrolytic polarisation, overvoltage.
θ angle of contact; temperature—not on absolute scale.
κ compressibility; specific conductance; magnetic susceptibility—volume.
Λ equivalent conductance.
λ wave length.
μ chemical potential; dipole moment; magnetic permeability.
with subscript: (refractive index).
μ. micron.
ν frequency; wave number.
Π pressure, especially osmotic pressure.
Π product.
π (electrolytic polarisation, overvoltage).
π ratio of circumference to diameter.
ρ density; specific resistance.
Σ sum.
σ diameter of molecules; (surface tension); (specific conductance).
τ time interval, especially half or mean life.
ϕ fluidity; electronic exit work function; magnetic flux.
Φ function.
χ magnetic susceptibility—mass.
ψ wave function.
Ω. ohm.
ω angular velocity; specific magnetic rotation.

ADDITIONS TO THE LIBRARY OF THE CHEMICAL SOCIETY DURING THE YEAR 1942.

ACCUM, FREDRICK. A system of theoretical and practical chemistry. 2 vols. London 1803. (Printed on paper made of straw.) (*Reference.*)

—— A practical treatise on gaslight. London 1815. (*Reference.*)

ADAM, NEIL KENSINGTON. The physics and chemistry of surfaces. 3rd edition. London 1941. pp. xii + 436. ill.

ADVANCES IN COLLOID SCIENCE. Edited by ELMER O. KRAEMER, in collaboration with FLOYD E. BARTELL and S. S. KISTLER. Vol. I. New York 1942. pp. xii + 434. ill. (*Reference.*)

ALCHEMIST, THE. Vol. XVII. Special number. Thomas Stewart Patterson. Glasgow 1942. pp. 20. ill.

ALLEN, R. M. Photo-micrography. New York 1941. pp. viii + 365. ill.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. Liebig and after Liebig: a century of progress in agricultural chemistry. Edited by F. R. MOULTON. Washington 1942. pp. viii + 111. ill.

AMERICAN ASSOCIATION OF CEREAL CHEMISTS. Cereal laboratory methods, with reference tables. 4th edition. Lincoln, Nebraska 1941. pp. xii + 264. ill.

AMERICAN SOCIETY FOR TESTING MATERIALS. Symposium on new methods for particle size determination in the subsieve range. Philadelphia 1941. pp. vi + 111. ill. (*Reference.*)

AMERICAN SOCIETY FOR TESTING MATERIALS and INTER-SOCIETY COLOR COUNCIL. Symposium on color—its specification and use in evaluating the appearance of materials. Philadelphia 1941. pp. vi + 179. ill. (*Reference.*)

AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS. A symposium on the structure of protoplasm. Edited by W. SEIFRIZ. Ames 1942. pp. viii + 283.

ANNALS OF CHEMICAL MEDICINE. Edited by J. L. W. THUDICHUM. 2 vols. London 1879–81. pp. xii + 343, x + 334.

ANNUAL REVIEWS OF PETROLEUM TECHNOLOGY. *See* INSTITUTE OF PETROLEUM.

ANSLEY, A. J. Temperature control. London 1942. pp. viii + 127. ill.

ARTHUS, MAURICE. Élémens de chimie physiologique. 3rd edition. Paris [1900]. pp. x + 391.

ASSOCIATION OF CAMPHOR INDUSTRY ENGINEERS IN JAPAN. Literatures on camphor and camphor oil (1900—1939). Tokyo 1940. pp. xii + 442. (*Reference.*)

ASTON, F. W. Mass spectra and isotopes. 2nd edition. London 1942. pp. xii + 276. ill.

AUSTIN, P. C. *See* COHEN, J. B.

AUSTRALIA, COMMONWEALTH OF. *Advisory Council on Nutrition.* 5th and Final Reports. Canberra 1938. pp. 55, 165. ill. (*Reference.*)

BADGER, W. L., and BAKER, E. M. Inorganic chemical technology. 2nd edition. New York 1941. pp. xii + 237. ill.

BAHL, R. K. *See* DUNNICLIFF, H. B.

BAKER, E. M. *See* BADGER, W. L.

BARRON, HARRY. Modern synthetic rubbers. London 1942. pp. viii + 274. ill.

BARTELL, FLOYD E. *See* ADVANCES IN COLLOID SCIENCE.

BAUER, WALTER H. *See* DAVISON, ALBERT W.

BEITRÄGE ZUR WISSENSCHAFTLICHEN MEDICIN UND CHEMIE. Festschrift zu Ehren des sechszigsten Geburtstages von ERNST SALKOWSKI. Berlin 1904. pp. viii + 480.

BELL, R. P. Acid-base catalysis. Oxford 1941. pp. viii + 211. ill.

BENEDICT, R. RALPH. *See* MAXFIELD, FREDERICK A.

BENNETT, WILLIAM. The economics of coal blending in carbonizing processes. Ashton-under-Lyne 1942. pp. 50. ill.

BERKMAN, SOPHIA, and EGLOFF, GUSTAV. Emulsions and foams. New York 1941. pp. viii + 591. ill.

BERNSTEIN, JULIUS. Die Kräfte der Bewegung in der lebenden Substanz. Braunschweig 1902. pp. 28.

BERTHELOT, M. La synthèse chimique. 8th edition. Paris 1897. pp. viii + 294.

BEUTENMÜLLER, H. *See* MOHR, L.

BIERRY, H. Recherches sur les diastases qui concourent à la digestion des hydrates de carbone. Fontenay-aux-Roses 1911. pp. 282.

BIERRY, H., and RATHERY, F. Introduction à la physiologie des sucres. Paris 1935. pp. vi + 418.

BIOLOGICAL SYMPOSIA. Vol. V. Edited by HOWARD B. LEWIS. Comparative biochemistry. Intermediate metabolism of fats. Carbohydrate metabolism. Biochemistry of choline. Lancaster, Pa. 1941. pp. x + 247. ill.

BLOCH, L. Ionisation et résonance des gaz et des vapeurs. London 1925. pp. 223. ill.

BORON AGRICULTURAL BUREAU. Boron in agriculture. London 1940. pp. 36. ill.

BOURNE, G. [Editor.] Cytology and cell physiology. Oxford 1942. pp. xii + 296. ill.

BOURQUELOT, É. Les fermentations. Paris 1893. pp. iv + 204. ill.

BOWEN, E. J. The chemical aspects of light. Oxford 1942. pp. viii + 191. ill.

BOY, G. Les caractères essentials du metabolisme azoté contingent: catabolisme protéïque endogène et inanation. Lons-le-Saunier 1935. pp. x + 156.

—— Action des sels de manganèse et de zinc à concentrations toxiques sur les rendements énergétiques dans la germination. Lons-le-Saunier 1935. pp. 157 to 171.

BRIDGES, M. A., and MATTICE, M. R. Food and beverage analyses. 2nd edition. Philadelphia 1942. pp. 344.

BRIDGMAN, P. W. The nature of thermodynamics. Cambridge, Mass. 1941. pp. xii + 229.

BRITISH HARD COKE ASSOCIATION. *See* NATIONAL FEDERATION OF GAS COKE ASSOCIATIONS.

BRITISH PLASTICS YEAR BOOK, 1942. The handbook and guide to the plastics industry. Bedford 1942. pp. 464. ill. (*Reference.*)

BRITISH STANDARDS INSTITUTION. War emergency B.S. 987 and 987C: 1942. Camouflage paints. pp. 21. ill.

—— B.S. 997: 1941. Crude sperm oil. pp. 15. ill.

—— B.S. 998: 1941. Pure vacuum salt for dairy purposes. pp. 11.

—— B.S. 1011: 1942. Red lead ready mixed paints. pp. 12. ill.

—— B.S. 1013: 1942. Sanitary or disinfectant powders. pp. 8.

—— B.S. 1014: 1942. Pigments for colouring magnesium oxychloride and concrete. pp. 18.

—— War emergency B.S. 1033: 1942. Priming paint (lead base) for the protection of steel sheet. pp. 10. ill.

—— B.S. 1045: 1942. Manganese steel cylinders for atmospheric gases. pp. 12. ill.

—— War emergency B.S. 1053: 1942. Water paints and distempers for interior use. pp. 10. ill.

—— War emergency B.S. 1056: 1942. Painting of buildings in war-time. pp. 19.

—— War emergency B.S. 1057: 1942. Substitute paints: exterior finishing. pp. 9. ill.

—— B.S. 1079: 1942. Hæmoglobinometers, Haldane type. pp. 12. ill.

BRITTON, H. T. S. Hydrogen ions: their determination and importance in pure and industrial chemistry. 3rd edition. 2 vols. London 1942. pp. xix + 420; xix + 443.

BROCKLESBY, H. N. *See* CANADA. *Fisheries Research Board.*

BROGLIE, M. DE. Les rayons X. Paris 1922. pp. 164. ill.

BROUGHTON, G. *See* LEWIS, W. K.

BROWN, W. BURNS. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

BROWNE, C. A., and ZERBAN, F. W. Physical and chemical methods of sugar analysis. 3rd edition. New York 1941. pp. xiv + 1353. ill.

BRUCE, J., and HARPER, H. Practical chemistry. 5th edition. London 1941. pp. xii + 509. ill.

BRUGSCH, THEODOR, and SCHITTENHELM, ALFRED. Der Nukleinstoffwechsel und seine Störungen. (Gicht, Uratsteindiathese v.a.) Jena 1910. pp. viii + 166.

BURR, GEORGE O. *See* EVANS, HERBERT MCLEAN.

CAMERON, A. T. A textbook of biochemistry. 6th edition. London 1942. pp. viii + 376. ill.

CANADA. *Fisheries Research Board.* The chemistry and technology of marine animal oils with particular reference to those of Canada. Edited by H. N. BROCKLESBY. Ottawa 1941. pp. 442. ill.

—— *National Research Council.* Associate Committee on Trail Smelter Smoke. Effect of sulphur dioxide on vegetation. Ottawa 1939. pp. x + 447. ill.

CARLSBERG, LABORATOIRE DE. Comptes-Rendus des Travaux. Vol. XII. Copenhage 1917. (*For circulation.*)

CHEMICAL ENGINEERS' HANDBOOK. Prepared by a staff of specialists. JOHN H. PERRY, Editor. 2nd edition. New York 1941. pp. xviii + 3029. ill. (*Reference.*)

CHEMIE-INGENIEUR, DER. Vol. III. Part 3. Operationen bei normalem Druck und normaler Temperatur. Edited by A. EUCKEN. Leipzig 1939. pp. xii + 332. ill.

CHOWDHURY, R. R. Handbook of mica. Brooklyn 1941. pp. xvi + 340. ill.

CLAPPERTON, ROBERT HENDERSON, and HENDERSON, WILLIAM. Modern paper-making. Oxford 1941. pp. xii + 376. ill.

CLAYTON, WILLIAM. The theory of emulsions and their technical treatment. 4th edition. London 1942. pp. viii + 492. ill.

COHEN, J. B. Theoretical organic chemistry. 4th edition. By P. C. AUSTIN. London 1942. pp. xvi + 622. ill.

CONDENSED CHEMICAL DICTIONARY. 3rd edition. Edited by T. C. GREGORY. New York 1942. pp. 755. (*Reference.*)

COOPER-KEY, A. A primer on the storage of petroleum spirit and carbide of calcium. London 1914. pp. viii + 128.

COTTON, R. T. Insect pests of stored grain and grain products: identification, habits and methods of control. Minneapolis 1941. pp. iv + 242. ill.

DAKE, H. C. *See* DE MENT, H.

DALE, H. GORDON. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

DANIELS, FARRINGTON, MATTHEWS, J. HOWARD, and WILLIAMS, JOHN WARREN. Experimental physical chemistry. 3rd edition. New York 1941. pp. xviii + 460. ill.

DAVISON, ALBERT W., KLOOSTER, HENRY S. VAN, and BAUER, WALTER H. Laboratory manual of physical chemistry. 3rd edition. New York 1941. pp. viii + 229. ill.

DEGERING, E. F., and collaborators. An outline of organic chemistry. 4th edition. New York 1941. pp. xviii + 386.

—— The work book of fundamental organic chemistry. New York 1941. pp. 256.

—— An outline of organic nitrogen compounds. Cincinnati 1942. pp. vi + 381.

—— Fundamental organic chemistry. Cincinnati 1942. pp. x + 485. ill.

DE MENT, J. Fluorescent chemicals and their applications. With a special chapter on ultraviolet radiation sources by H. C. DAKE. Brooklyn 1942. pp. xiv + 240. ill.

DE MENT, J., and DAKE, H. C. Uranium and atomic power. Brooklyn 1941. pp. viii + 335. ill.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. The control of insects infesting dried fruits. By W. BURNS BROWN and A. E. H. HIGGINS. London 1942. pp. 23. ill.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Food Investigation.* Special Report No. 52. The mode of occurrence of fatty acid derivatives in living tissues: a review of present knowledge. By J. A. LOVERN. London 1942. pp. 36.

—— *Water Pollution Research.* Technical Paper No. 8. The treatment and disposal of waste waters from dairies and milk products factories. London 1941. pp. viii + 125. ill.

DESCH, C. H. Metallography. 5th edition. London 1942. pp. viii + 408. ill.

DEUTSCHE CHEMISCHE GESELLSCHAFT. Periodica Chimica. Edited by M. PFLÜCKE. Berlin 1940. pp. viii + 208. (*Reference.*)

DOBBIN, LEONARD. Occasional fragments of chemical history. Edinburgh 1942. pp. viii + 85. ill.

DOLE, MALCOLM. The glass electrode: methods, applications, and theory. New York 1941. pp. xvi + 332. ill.

DOSS, M. P. *See* TEXAS COMPANY.

DUNNICLIFF, H. B., and BAHL, R. K. A history of chemistry in the Panjab. Lahore 1927. pp. 16.

EGLOFF, GUSTAV. *See* BERKMAN, SOPHIA.

ELBEL, H. Die wissenschaftlichen Grundlagen der Beurteilung von Blutalkoholbefunden. Leipzig 1937. pp. 106. ill.

ELDRIDGE, E. F. Industrial waste treatment practice. New York 1942. pp. xii + 401. ill.

ELECTROCHEMICAL SOCIETY. Modern electroplating. New York 1942. pp. 399. ill.

ELVEHJEM, C. A. *See* WAISMAN, HARRY A.

ENDEAVOUR: a quarterly review designed to record the progress of the sciences in the service of mankind. Vol. I, etc. London 1942+. (*Reference.*)

EUCKEN, A. *See* CHEMIE-INGENIEUR, DER.

EULER, H. Grundlagen und Ergebnisse der Pflanzenchemie. 2 vols. Braunschweig 1908. pp. x + 238, x + 298.

EVANS, E. A. [Editor.] The biological action of the vitamins: a symposium. Chicago 1942. pp. x + 227. ill.

EVANS, HERBERT MCLEAN, and BURR, GEORGE O. The antisterility vitamine fat soluble E. (*Mem. Univ. California,* 8.) Berkeley 1927. pp. 176. ill.

FELL, ALFRED. The early iron industry of Furness and district: an historical and descriptive account from earliest times to the end of the 18th century, with an account of Furness ironmasters in Scotland, 1726—1800. Ulverston 1908. pp. xviii + 464. ill. (*Reference.*)

FIESER, LOUIS F. Experiments in organic chemistry. 2nd edition. New York 1941. pp. xii + 488. ill.

FINDLAY, ALEXANDER. Practical physical chemistry. 7th edition. London 1941. pp. x + 335. ill.

FITZPATRICK, FREDERICK L. The control of organisms. New York 1940. pp. xiv + 334. ill.

FOOD INDUSTRIES MANUAL. 12th edition. London 1942. pp. 321. ill.

FORBES, E. B., and KEITH, M. H. A review of the literature of phosphorus compounds in animal metabolism. (*Ohio Agric. Exper. Station, Tech. Ser., Bull. No.* 5). Wooster 1914. pp. 748.

FREY, M.v. *See* WOOLDRIDGE, L. C.

FROMM, EMIL. Die chemischen Schutzmittel des Tierkörpers bei Vergiftungen. Strassburg 1903. pp. 32.

GAYDON, A. G. Spectroscopy and combustion theory. London 1942. pp. x + 191. ill.

GIBB, T. R. P. Optical methods of chemical analysis. New York 1942. pp. xiv + 391. ill.

GIRAL, FRANCISCO. *See* ROJAHN, C. A.

GLASSTONE, SAMUEL. *See* TAYLOR, H. S.

GRANT, JULIUS. Science for the prosecution. London 1941. pp. viii + 302. ill.

—— A laboratory handbook of pulp and paper manufacture. Incorporating the 4th edition of Stevens's "Paper mill chemist." London 1942. pp. viii + 320. ill.

GREGORY, T. C. *See* CONDENSED CHEMICAL DICTIONARY.

GUICHARD, P. Précis de chimie industrielle. Paris 1894. pp. viii + 422. ill.

HARPER, H. *See* BRUCE, J.

HARTWELL, J. L. *See* UNITED STATES PUBLIC HEALTH SERVICE. *National Cancer Institute.*

HATFIELD, W. H. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

HEALEY, R. H., and REED, J. W. The behaviour of slow electrons in gases: an account of diffusion methods together with a comparison between results obtained by these and by various other methods. Sydney 1941. pp. xii + 179. ill.

HENDERSON, WILLIAM. *See* CLAPPERTON, ROBERT HENDERSON.

HÉRISSEY, H. Recherches chimiques et physiologiques sur la digestion des mannanes et des galactanes, par la séminase chez les végétaux. Lille 1903. pp. 87.

HIGGINS, A. E. H. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

HIGH POLYMERS. Vol. IV. Natural and synthetic high polymers. By K. H. MEYER. Translated by L. E. R. PICKEN. New York 1942. pp. xviii + 690. ill.

HIMUS, GODFREY W. Fuel testing. 2nd edition. London 1942. pp. xvi + 288.

HOARE, W. E. *See* TIN RESEARCH INSTITUTE. Publication No. 107.

HOFMEISTER, FRANZ. Die chemische Organisation der Zelle. Braunschweig 1901. pp. 29.

HOLDER, E. J. Surgical sutures and ligatures. Edinburgh 1939. pp. 64. ill.

HUDSON, O. F. *See* NIGHTINGALE, S. J.

HÜCKEL, W. Theoretische Grundlagen der organischen Chemie. 3rd edition. Vol. I. Leipzig 1940. pp. xii + 616. (*Reference.*)

INDIAN LAC RESEARCH INSTITUTE. Practical applications of recent lac research. Edited by H. K. SEN. Namkum 1940. pp. viii + 78 + vi. ill.

INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND. "The precious metals." By H. GORDON DALE. 24th Streatfeild Memorial Lecture. London 1941. pp. 20. ill.

—— Lecture on rust-, acid- and heat-resisting steels. By W. H. HATFIELD. London 1942. pp. 48. ill.

INSTITUTE OF PETROLEUM. Annual Reviews of Petroleum Technology. Vol. VI. Birmingham 1941. pp. iv + 318. ill. (*Reference.*)

—— Standard methods for testing petroleum and its products. 4th edition. London 1942. pp. xvi + 390. ill.

INTER-SOCIETY COLOR COUNCIL. *See* AMERICAN SOCIETY FOR TESTING MATERIALS.

IODINE EDUCATIONAL BUREAU. Iodine facts. No. 1, etc. London 1940 +. (*Reference.*)

ISELY, DWIGHT. Methods of insect control. 2nd edition. 2 parts. Minneapolis 1941—42. pp. ii + 121, ii + 135.

JACOBS, M. B. War gases: their identification and decontamination. New York 1942. pp. xiv + 180. ill.

JOLLES, ADOLF. Die Fette vom physiologisch-chemischen Standpunkte. Strassburg 1907. pp. 71.

JOURNAL OF BIOCHEMISTRY. Vol. XXV. Tokyo 1937. (*Reference.*)

JOURNAL OF INDUSTRIAL HYGIENE AND TOXICOLOGY. Vol. XXII. Baltimore 1940.

KASTLE, J. H. The oxidases and other oxygen-catalysts concerned in biological oxidations. (*U.S. Hygienic Lab., Bull. No.* 59.) Washington 1910. pp. 164.

KAYE, G. W. C., and LABY, T. H. Tables of physical and chemical constants and some mathematical functions. 9th edition. London 1941. pp. viii + 181. (*Reference.*)

KEITH, M. H. *See* FORBES, E. B.

KISTLER, S. S. *See* ADVANCES IN COLLOID SCIENCE.

KLIMONT, J. *See* ULZER, F.

KLOOSTER, HENRY S. VAN. *See* DAVISON, ALBERT W.

KNAGGS, I. E., and KARLIK, B. Tables of cubic crystal structure of elements and compounds. With a section on alloys by C. F. ELAM. London 1932. pp. 90.

KOEBEL, N. K. Industrial controlled atmospheres. [2nd edition.] Chicago 1942. pp. xii + 97. ill.

KOLTHOFF, I. M., and LAITINEN, H. A. *p*H and electro titrations. 2nd edition. New York 1941. pp. x + 190. ill.

KOLTHOFF, I. M., and STENGER, V. A. Volumetric analysis. 2nd edition. Vol. I. New York 1942. pp. xvi + 309. ill.

KRAEMER, ELMER O. *See* ADVANCES IN COLLOID SCIENCE.

KRÄNZLEIN, GEORG. Aluminiumchlorid in der organischen Chemie. 3rd edition. Edited by P. KRÄNZLEIN. Berlin 1939. pp. 281.

KRÄNZLEIN, P. *See* KRÄNZLEIN, GEORG.

KROGH, A. The comparative physiology of respiratory mechanisms. Philadelphia 1941. pp. viii + 172. ill.

LABY, T. H. *See* KAYE, G. W. C.

LAITINEN, G. W. C. *See* KOLTHOFF, I. M.

LANFORD, CAROLINE SHERMAN. *See* SHERMAN, HENRY C.

LECOMTE, J. Le spectre infrarouge. Paris 1928. pp. 468. ill.

LEIGHTON, PHILIP ALBERT. *See* NOYES, WILLIAM ALBERT, jun.

LEWIS, HOWARD B. *See* BIOLOGICAL SYMPOSIA.

LEWIS, W. K., SQUIRES, L., and BROUGHTON, G. Industrial chemistry of colloidal and amorphous materials. New York 1942. pp. xiv + 540. ill.

LIEBIG, JUSTUS VON. Die organische Chemie in ihrer Anwendung auf Agrikultur und Physiologie. Braunschweig 1940. pp. xii + 352.

—— Gährung, über Quelle der Muskelkraft und Ernährung. Leipzig 1870. pp. xii + 138.

LOVERN, J. A. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Food Investigation.* Special Report No. 52.

MCALPINE, R. K., and SOULE, B. A. Fundamentals of qualitative chemical analysis. 2nd edition. New York 1941. pp. xii + 375.

MACORMAC, A. R. *See* MERRILL, G. R.

MANTELL, C. L. [and others]. The technology of natural resins. New York 1942. pp. viii + 506. ill.

MAQUENNE, L. Les sucres et leurs principaux dérivés. Paris 1900. pp. viii + 1032.

MARSH, J. T., and WOOD, F. C. An introduction to the chemistry of cellulose. 2nd edition. London 1942. pp. xvi + 512. ill.

MARTINDALE, [W. H.]. The extra pharmacopœia. 22nd edition. Vol. I. London 1941. pp. xl + 1289. (*Reference.*)

MATHEWS, J. HOWARD. *See* DANIELS, FARRINGTON.

MATTICE, M. R. *See* BRIDGES, M. A.

MATTIELLO, JOSEPH J. [Editor.] Protective and decorative coatings: paints, varnishes, lacquers and inks. Vol. I. Raw materials for varnishes and vehicles. New York 1941. pp. xii + 819. ill.

MAUERSBERGER, H. R. *See* MERRILL, G. R.

MAXFIELD, FREDERICK A., and BENEDICT, R. RALPH. Theory of gaseous conduction and electronics. New York 1941. pp. xiv + 483. ill.

MAZÉ, P. Évolution du carbone et de l'azote dans le monde vivant. Paris 1899. pp. 110.

MEES, C. E. K. The theory of the photographic process. New York 1942. pp. x + 1124. ill.

MERCK & CO. The Merck manual of therapeutics and materia medica. 7th edition. Rahway 1940. pp. x + 1436. (*Reference.*)

MERRILL, G. R., MACORMAC, A. R., and MAUERSBERGER, H. R. American cotton handbook: a practical reference book for the entire cotton industry. New York 1941. pp. [xx] + 1024. ill. (*Reference.*)

MERZ, A. Bewertung chemisch gefällter Kreiden nach neuzeitlichen Gesichtspunkten. Dresden 1939. pp. viii + 49. ill.

MEYER, K. H. *See* HIGH POLYMERS.

MEYERHOF, O. [and others]. A symposium on respiratory enzymes. Madison 1942. pp. xii + 281. ill.

MIESCHER, FRIEDRICH. Die histochemischen und physiologischen Arbeiten. 2 vols. Leipzig 1897. pp. iv + 138, vi + 543. ill.

MINISTRY OF AGRICULTURE AND FISHERIES. Bulletin No. 124. The composition and nutritive value of feeding stuffs. By H. E. WOODMAN. London 1942. pp. 22.

MOHR, L., and BEUTTENMÜLLER, H. Die Methodik der Stoffwechseluntersuchungen. Wiesbaden 1911. pp. x + 176. ill.

MOREL, ALBERT. Précis de technique chimique à l'usage des laboratoires médicaux. Paris 1909. pp. iv + 832. ill.

MORTON, AVERY ADRIAN. Laboratory technique in organic chemistry. New York 1938. pp. x + 261. ill.

MORTON, R. A. The application of absorption spectra to the study of vitamins, hormones and coenzymes. 2nd edition. London 1942. pp. 226. ill.

MOULTON, FOREST RAY. *See* AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

NATIONAL FEDERATION OF GAS COKE ASSOCIATIONS, BRITISH HARD COKE ASSOCIATION and SOUTH WALES ANTHRACITE AND DRY COAL COMMITTEE. Producer gas plant for industrial purposes : its operation and maintenance. London 1942. pp. viii + 88. ill.

NEEDHAM, J. Biochemistry and morphogenesis. Cambridge 1942. pp. xvi + 787. ill.

NELSON, W. L. Petroleum refinery engineering. 2nd edition. New York 1941. pp. x + 715. ill.

NICHOLLS, J. R. Aids to the analysis of foods and drugs. 6th edition. London 1942. pp. viii + 424.

NIEDERL, J. B., and NIEDERL, V. Micromethods of quantitative organic analysis. 2nd edition. New York 1942. pp. xiv + 347. ill.

NIEDERL, V. *See* NIEDERL, J. B.

NIGHTINGALE, S. J. Tin solders. 2nd edition. Revised by O. F. HUDSON. London 1942. pp. xii + 117. ill.

NOYES, WILLIAM ALBERT, jun., and LEIGHTON, PHILIP ALBERT. The photochemistry of gases. (American Chemical Society, Monograph Series.) New York 1941. pp. 475. ill.

ORGANIC SYNTHESES. Collective Vol. I. 2nd edition. New York 1941. pp. xii + 580. ill. (*Reference.*)

OSBORNE, THOMAS B. The proteins of the wheat kernel. Washington 1907. pp. 119.

OSWALD, ADOLPH. Ueber die chemische Beschaffenheit und die Function der Schilddrüse. Strassburg 1900. pp. 61.

PALMER, W. G. Experimental physical chemistry. Cambridge 1941. pp. xii + 321. ill.

PATERSON, THOMAS STEWART. *See* ALCHEMIST, THE.

PAULI, WOLFGANG. Der kolloidale Zustand und die Vorgänge in der lebendigen Substanz. (From the *Naturwiss. Rundschau*, 1902, 17.) pp. 32.

PEARSON, C. S. *See* SHERMAN, H. C.

PERRY, JOHN H. *See* CHEMICAL ENGINEERS' HANDBOOK.

PFLÜCKE, M. *See* DEUTSCHE CHEMISCHE GESELLSCHAFT.

PICKEN, L. E. R. *See* HIGH POLYMERS.

PIETTRE, M. Recherches sur la bile. Laval 1910. pp. xii + 225. ill.

PIGOTT, E. C. The chemical analysis of ferrous alloys and foundry materials. London 1942. pp. xvi + 362.

"PLASTES." Plastics in industry. 2nd edition. London 1942. pp. xiv + 248. ill.

PLUMMER, H. *See* TIN RESEARCH INSTITUTE. Publication No. 107.

RATHERY, F. *See* BIERRY, H.

READ, J. Explosives. London 1942. pp. 160. ill.

REED, J. W. *See* HEALEY, R. H.

REMINGTON, J. S. The paint laboratory note book. 2nd edition. London 1942. pp. xii + 138. ill.

RHODES, THOMAS J. Industrial instruments for measurement and control. New York 1941. pp. x + 573. ill.

RICHTER, V. VON. Organic chemistry. 3 vols. London 1915—23. (*For circulation.*)

ROBINSON, G. W. Soils : their origin, constitution, and classification. London 1932. pp. xvi + 390. ill.

ROJAHN, C. A. Preparación de productos quimicos y quimico-farmaceuticos. Translated from the German and amplified by F. GIRAL. 2 vols. Mexico 1942. pp. xl + 458, 459 to 1002.

ROSENBERG, H. R. Chemistry and physiology of the vitamins. New York 1942. pp. xx + 674. ill.

RUHEMANN, B. *See* RUHEMANN, M.

RUHEMANN, M., and RUHEMANN, B. Low temperature physics. Cambridge 1937. pp. x + 313. ill.

SALKOWSKI, ERNST. *See* BEITRÄGE ZUR WISSENSCHAFTLICHEN MEDICIN UND CHEMIE.

SCHADE, H. Die physikalische Chemie in der inneren Medizin. Dresden 1921. pp. viii + 569. ill.

SCHITTENHELM, ALFRED. *See* BRUGSCH, THEODOR.

SCHOLES, SAMUEL R. Modern glass practice. [Revised edition.] Chicago 1941. pp. vi + 289. ill.

SCHURECHT, H. G., and WOOD, K. T. The use of borax and boric acid together with salt in salt glazing. New York 1942. pp. 48. ill.

SCOFFERN, J. A manual of chemical analysis for the young. London [1854]. (*Reference.*)

SEIFRIZ, W. *See* AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS.

SHERMAN, HENRY C. Chemistry of food and nutrition. 6th edition. New York 1941. pp. xii + 611. ill.

SHERMAN, HENRY C., and LANFORD, CAROLINE SHERMAN. Essentials of nutrition. New York 1940. pp. x + 418. ill.

SHERMAN, HENRY C., and PEARSON, C. S. Modern bread from the viewpoint of nutrition. New York 1942. pp. x + 118.

SHIMIZU, T. Über die Chemie und Physiologie der Gallensäuren. Okayama 1935. pp. xviii + 388. ill.

SIMONDS, H. R. Industrial plastics. [2nd edition.] New York 1941. pp. xii + 385. ill.

SOULE, BYRON A. Library guide for the chemist. New York 1938. pp. xiv + 302.

— *See* MCALPINE, R. K.

SOUTH WALES ANTHRACITE AND DRY COAL COMMITTEE. *See* NATIONAL FEDERATION OF GAS COKE ASSOCIATIONS.

SQUIRES, L. *See* LEWIS, W. K.

STEINER, LUKE E. Introduction to chemical thermodynamics. New York 1941. pp. xiv + 516. ill.

STENGER, V. A. *See* KOLTHOFF, I. M.

STRAIN, HAROLD H. Chromatographic adsorption analysis. New York 1942. pp. x + 222. ill.

SUTERMEISTER, EDWIN. Chemistry of pulp and paper making. 3rd edition. New York 1941. pp. xii + 529. ill.

TAYLOR, H. S., and GLASSTONE, SAMUEL. [Editors.] A treatise on physical chemistry. 3rd edition. Vol. I. New York 1942. pp. viii + 679. ill.

TEXAS COMPANY, THE. Physical constants of the principal hydrocarbons. 3rd edition. Compiled by M. P. Doss. New York 1942. pp. x + 215.

THATCHER, ROSCOE W. The chemistry of plant life. New York 1921. pp. xvi + 268.

THOMAS, C. A., [and others]. Anhydrous aluminum chloride in organic chemistry. (American Chemical Society, Monograph Series.) New York 1942. pp xiv + 972. ill.

THOMAS, P. Recherches biochimiques sur les protéiqes de la levure. Laval 1919. pp. vi + 166.

THUDICHUM, J. L. W. Die chemische Konstitution des Gehirns des Menschen und der Tiere. Tübingen 1901. pp. xii + 339.

— *See* ANNALS OF CHEMICAL MEDICINE.

TIN RESEARCH INSTITUTE. Publication No. 107. Hot-tinning "difficult" mild steels. By W. E. HOARE and H. PLUMMER. Greenford 1941. pp. 28. ill.

TITANIUM ALLOY MANUFACTURING CO. Titanium and its use in steel. New York 1940. pp. 113. ill.

ULZER, F., and KLIMONT, J. Allgemeine und physiologische Chemie der Fette. Berlin 1906. pp. xii + 317. ill.

UNITED STATES PUBLIC HEALTH SERVICE. *National Cancer Institute.* Survey of compounds which have been tested for carcinogenic activity. By J. L. HARTWELL. [Washington] 1941. pp. 371. (*Reference.*)

VERNON, H. M. Intracellular enzymes. London 1908. pp. xii + 240.

VILBRANDT, F. C. Chemical engineering plant design. 2nd edition. New York 1942. pp. x + 452. ill.

WAISMAN, HARRY A., and ELVEHJEM, C. A. The vitamin content of meat. Minneapolis 1941. pp. iv + 210. (Two copies.)

WELCHER, FRANK. Chemical solutions: reagents useful to the chemist, biologist, and bacteriologist. New York 1942. pp. viii + 404. (*Reference.*)

WHITTAKER, C. M., and WILCOCK, C. C. Dyeing with coal-tar dyestuffs. 4th edition. London 1942. pp. viii + 371. ill.

WILCOCK, C. C. *See* WHITTAKER, C. M.

WILLIAMS, HAL. Mechanical refrigeration. 5th edition. London 1941. pp. xii + 564. ill.

WILLIAMS, JOHN WARREN. *See* DANIELS, FARRINGTON.

WILLIAMS, S. R. Hardness and hardness measurements. Cleveland 1942. pp. viii + 558. ill.

WILSON, J. S. The pasteurization of milk. London 1942. pp. xii + 212. ill.

WOOD, F. C. *See* MARSH, J. T.

WOODMAN, H. E. *See* MINISTRY OF AGRICULTURE AND FISHERIES. Bulletin No. 124.

WOODROFFE, D. Fundamentals of leather science. Croydon 1941. pp. 158. ill.

WOOLDRIDGE, L. C. Die Gerinnung des Blutes. Edited by M. v. FREY. Leipzig 1891. pp. xii + 51.

WOOLDRIDGE, W. R. War gases and foodstuffs: chemical warfare and food supplies. London 1942. pp. iv + 50. ill.

WURTZ, A. La théorie atomique. 8th edition. Paris 1898. pp. lvi + 248. ill.

ZERBAN, F. W. *See* BROWNE, C. A.

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